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Draft I-70 First Tier Environmental Impact Statement (FTEIS)

The Study Team has completed a Draft First Tier Environmental Impact Statement (Draft FTEIS), which proposes an identified preferred strategy for improving I-70 in the Kansas City Metropolitan Area. The



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- Chapter 1 Purpose and NeedChapter 2 Alternatives Considered
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I-70 Draft First Tier Environmental Impact Statement



Federal Highway Administration Missouri Department of Transportation

March 2010

First Tier Environmental Impact Statement for Route I-70, Jackson County, from the end of the last ramp termini east of the Missouri and Kansas state line to east of the I-470 interchange, including the entire Kansas City, Missouri's Downtown Central Business Freeway Loop Job Number J4I1486B

DRAFT FIRST TIER ENVIRONMENTAL IMPACT STATEMENT

Submitted Pursuant to 42 U.S.C. 4332(2)(c), 49 U.S.C. 303 by the

U.S. Department of Transportation Federal Highway Administration and the Missouri Department of Transportation

Date of Approval

For MoDOT

Date of Approval

The following persons may be contacted for additional information about this document:

Ms. Peggy Casey

Environmental Projects Team Leader

Federal Highway Administration, Division Office

3220 West Edgewood, Suite H

Jefferson City, MO 65109

(573) 636-7104

Mr. Kevin Keith Chief Engineer

Missouri Department of Transportation

P.O. Box 270

Jefferson City, MO 65102

(573) 751-4622

This Draft First Tier Environmental Impact Statement (FTEIS) documents the human and natural environmental effects of potential strategies for improving I-70 on the Missouri side of the Kansas City Metro Area. The No-Build Strategy and three Build Strategies are evaluated in this document. The document contains an Identified Preferred Strategy that consists of the elements of the Improve Key Bottlenecks Strategy in the Kansas City Downtown Loop and extending along I-70 to east of I-435. From east of I-435 to I-470, the Identified Preferred Strategy is to include either the Improve Key Bottlenecks Strategy or the Add General Lanes Strategy. This decision will be left open to the Second Tier studies.

Comments on this document should be directed to the individuals listed above by: May 7, 2010.

I-70 FIRST TIER DRAFT EIS

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EXECUTIVE SUMMARY

The Missouri Department of Transportation (MoDOT) and the Federal Highway Administration (FHWA) prepared this Draft First Tier Environmental Impact Statement (FTEIS) to discuss and compare strategies for improving I-70 in Kansas City Metropolitan Area.

What is the I-70 First Tier Environmental Impact Statement?

Under the National Environmental Policy Act (NEPA), FHWA requires an environmental study before a major highway project can be constructed. NEPA promotes efforts that prevent, minimize, or mitigate damage to the environment. An Environmental Impact Statement (EIS) is the documentation of the project's impact to the human and natural environment.

This I-70 environmental study is following a tiered environmental documentation process. Tiering complies with NEPA requirements and other environmental regulations. First Tier documents address broad programs or overall corridor strategies and issues in an initial, high level environmental impact analysis. The tiered process enables a decision-making process that focuses on issues that are ready for decision and reduces repetition in environmental documents. First Tier documents frame and narrow the boundaries and scope for multiple future Second Tier studies.

For the Second Tier studies, the portion of I-70 covered by this FTEIS as well as the downtown loop will be divided into Sections of Independent Utility. At this time, the proposed Sections of Independent Utility are the five Sub-Areas in **Figure 3.0** at the end of **Chapter 3**.

What is the I-70 FTEIS Study Area?

The I-70 FTEIS Study Area is located entirely in Jackson County, Missouri. The Study Area is approximately 18 miles



Illustration of the Tiered
Environmental Process. The First
Tier Study covers a corridor that
will be broken down into
multiple future Second Tier
environmental studies.



I-70 Leading into Downtown Kansas City, Missouri

What is the downtown loop?

The downtown loop is the combination of I-70, I-35, I-29, and I-670 that form a circle or "loop" around the downtown area.

What is a bottleneck?

A bottleneck is a section of a road where movement of traffic is limited by the road design. This is often a section of road with a fewer number of lanes, a sharp curve, or traffic joining the road at an interchange. A bottleneck is the most vulnerable point for congestion in a road network and is also referred to as a chokepoint.



Congestion on I-70 Eastbound at Lister

in length from the end of the last ramp termini east of the Missouri and Kansas state line to east of the I-470 Interchange, including the downtown loop. I-70 is a four- or six-lane divided and fully access-controlled interstate facility. The Study Area includes all land within 100 feet of the existing highway right of way along the corridor and within 300 feet of the existing highway right of way at interchanges along I-70.

An expanded Study Area consisting of 1,000 feet on either side of the highway including the downtown loop is being evaluated for land use and socioeconomic studies. The extended Study Area is needed for land use and socioeconomic evaluations to properly assess the potential impacts.

The I-70 FTEIS Study Area is shown in **Figure 1.1** located at the end of **Chapter 1**.

Why is MoDOT Studying I-70 in the KC Metro?

The overall purpose of the I-70 FTEIS is to determine an improvement strategy for the corridor, including future capacity and mode choices, which addresses the following items:

- <u>Improve Safety:</u> Reduce crash rates and crash severity on I-70 and within the downtown loop.
- <u>Reduce Congestion:</u> Remove key bottlenecks; reduce the potential for ramp back-up onto the freeway; and improve multi-modal travel times in coordination with plans put forward by local and regional agencies.
- Restore and Maintain Existing Infrastructure: Improve bridge and pavement conditions on I-70 and the downtown loop and implement cost-effective investment strategies.
- <u>Improve Accessibility:</u> Provide travel options for all residents; increase safe access across I-70 and the downtown loop for non-motorized travel; and support local and regional land use plans.
- <u>Improve Goods Movement:</u> Improve the efficiency of freight movement on I-70 and the downtown loop.

The Study Team developed the elements of the purpose and need in coordination with the Local Study Management Team and I-70 Major Investment Study (MIS). Each of the above elements of the purpose and need for improvements is discussed in more detail in **Chapter 1 Purpose and Need**.

What Strategies did the Study Team Consider for Improving I-70?

MoDOT and FHWA worked with the local agencies, stakeholders, and the public to develop, refine, and evaluate improvement strategies for I-70 and the downtown loop.

The Study Team combined various concepts to develop 15 Initial Strategy Packages. The Strategy Packages were based on initial engineering and environmental analysis, MARC's Congestion Management System (CMS) toolbox, as well as comments and feedback from the local agencies, stakeholders, and the public. The first seven strategy packages evolved from the previously completed I-70 MIS. Eight other packages were focused, goal oriented strategy packages meant to address specific needs or issues along I-70.

The 15 Initial Strategy Packages were evaluated against the purpose and need for improving I-70:

- Improve Safety
- Reduce Congestion
- Restore and Maintain Existing Infrastructure
- Improve Accessibility
- Improve Goods Movement

Chapter 2 provides a summary of each of the Initial Strategy Packages.

What are the Four First Tier Strategy Packages?

The Study Team screened the 15 Initial Strategy Packages down to four First Tier Strategies.

What is meant by improvement strategies?

Improvement strategies are general, high level transportation improvement opportunities to address the transportation issues along I-70. Improvement strategies may include a series of specific transportation improvements such as adding lanes, fixing existing pavement and bridges, improving interchange ramps, and/or transit projects.

Who is the Study Team?

The Study Team is the people who have been working on this project including specialists from the FHWA, MoDOT, and the consultant team.

What is a screening process?

An evaluation that identifies which strategies best achieve the overall purpose of the project.

What is a First Tier Strategy?

A First Tier Strategy is one of four strategies that is carried forward from the 15 initial strategies for more detailed evaluation.

The Study Team also considered engineering issues and impacts to the human and natural environments. The complete memorandum discussing the screening process is located in **Appendix C**.

The screening process resulted in four strategy packages being carried forward. The recommend packages to be carried forward include:

- No-Build Strategy (This is a requirement of the NEPA process)
- Improve Key Bottlenecks Strategy
- Add General Lanes Strategy
- Transportation Improvement Corridor Strategy

Chapter 2 provides detailed information on the First Tier Strategies; the following paragraphs provide a summary.

No-Build Strategy

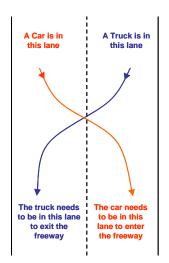
The No-Build Strategy includes maintenance activities as needed and projects already committed as part of existing Statewide Transportation Improvement Program (STIP). This includes activities such as:

- Repaying I-70 over time.
- Upgrading the downtown loop's northeast corner/Paseo Boulevard per the kcICON project.
- Upgrading the I-70 bridges as identified in the STIP. Over time, maintenance would occur as needed.
 - MoDOT has committed to modifying the freeway access along I-70 and I-435 to relieve congestion in the I-435 & I-70 interchange. The improvements include adding lanes to I-70; modifying ramps on I-70 EB into a collector-distributor system and extending ramps at several locations for additional weave, merge and diverge area; adding partial access at I-435 and US 40 and modifying access at I-70 and Manchester Trafficway; modifying the ramp terminals at US 40/31st Street; and replacing the Blue Ridge Cutoff Bridge. These improvements reduce congestion, improve safety and address two bridge maintenance needs in the interchange area.

Why is the No-Build Considered?

The No-Build Strategy is required in the NEPA process and is always an option in case the benefits of improvements to I-70 do not outweigh the environmental impacts.

What is a weave section?



The car and truck must cross the other traffic to get to the lane they want to be in.

• Maintaining the existing bus service.

There is an on-going South Loop Link study to evaluate the possibility of enclosing the south leg of the downtown loop to expand development opportunities in the downtown. The Second Tier Studies will coordinate with that planning effort and consider the recommended improvements from that study. In addition, the Wyandotte on-ramp to westbound I-670 was removed during the Bartle Hall expansion in 2005. There was a commitment to replace this ramp at a future date. The need to replace this connection or not and where the ramp would be located are issues that will be evaluated in the Second Tier Studies no matter which strategy is selected.

Improve Key Bottlenecks Strategy

The Improve Key Bottlenecks Strategy includes the activities from the No-Build Strategy described above. The Improve Key Bottlenecks Strategy is discussed in detail in **Section 2.2 First Tier Strategies Development** and is shown in **Figure 2.2**. The key elements from the Improve Key Bottlenecks Strategy include activities such as:

- Rebuild and/or rehabilitate I-70 and the entire downtown loop with a design life of 30 to 50 years
- Downtown loop lane balance improvements
- Improve interchanges by addressing ramp lengths, merge areas, and weave sections
- Consider interchange additions, consolidations, modifications, or eliminations to improve traffic flow and safety
- Improve the Jackson and Benton curves
- Rebuild the I-70/I-435 Interchange to provide six lanes on I-70 and six lanes on I-435 through the interchange
- Add collector distributor roads on I-70 and I-470 through the I-70/I-470 Interchange
- Enhance I-70 express bus service, provide for bus transit on shoulder, and explore locations to add park and ride lots as necessary

What does lane balance mean?

A lane balance issue occurs when the number of through lanes on the highway changes, usually as a result of a lane drop. An example of this is I-70 westbound at I-435.

Add General Lanes Strategy

The Add General Lanes Strategy includes the activities from the Improve Key Bottlenecks Strategy described above. The Add General Lanes Strategy is discussed in detail in **Section 2.2 First Tier Strategies Development** and is shown in **Figure 2.4**. The key elements from the Add General Lanes Strategy include activities such as:

- Rebuild and/or rehabilitate I-70 and the entire downtown loop with a design life of 30 to 50 years
- Rehabilitate and/or rebuild I-70 with four lanes in each direction from the downtown loop to I-470
- Downtown loop lane balance improvements
- Improve interchanges by addressing ramp lengths, merge areas, and weave sections
- Consider interchange additions, consolidations, modifications, or eliminations to improve traffic flow and safety
- Improve the Jackson and Benton curves
- Upgrade the Truman Road Interchange
- Rebuild the I-70/I-435 Interchange to provide eight lanes on I-70 and six lanes on I-435 through the interchange
- Add collector distributor roads on I-70 and I-470 through the interchange
- Integrating Operation Green Light on parallel routes
- Improve incident management response times
- Enhance I-70 express bus service, provide for bus transit on shoulder, and explore locations to add park and ride lots as necessary
- Add directional ramps in the southeast and southwest corners of the downtown loop

Transportation Improvement Corridor Strategy

The Transportation Improvement Corridor Strategy includes all of the parts of the Improve Key Bottlenecks Strategy plus it adds a dedicated transportation corridor between the downtown loop and I-470. The transportation improvement corridor could be located between the eastbound and westbound lanes or on one side of the I-70 corridor. As currently proposed, the transportation improvement corridor would be barrier separated from the regular traffic lanes. The

What is Operation Green Light?

Operation Green Light is a cooperative effort to improve the coordination of traffic signals and incident response on major routes throughout the Kansas City area.

transportation improvement corridor could be used for congestion managed lanes, reversible lanes, High Occupancy Vehicle (HOV) lanes, or bus lanes.

The Transportation Improvement Corridor Strategy, as described in detail in **Chapter 2** and shown in **Figure 2.6.**, includes activities such as:

- Rebuild and/or rehabilitate I-70 and the entire downtown loop with a design life of 30 to 50 years
- Add dedicated lanes that could be used for congestion managed lanes, reversible lanes, HOV lanes, or bus lanes located parallel to the general purpose lanes from the downtown loop to east of Lee's Summit Road
- Downtown loop lane balance improvements
- Improve interchanges by addressing ramp lengths, merge areas, and weave sections
- Consider interchange additions, consolidations, modifications, or eliminations to improve traffic flow and safety
- Improve the Jackson and Benton curves
- Rebuild the I-70/I-435 Interchange to provide a transportation improvement corridor on I-70 and six lanes on I-435 through the interchange
- Add collector distributor roads on I-70 and I-470 through the interchange
- Enhance I-70 express bus service, provide for bus transit on shoulder, and explore locations to add park and ride lots as necessary

What is the Identified Preferred Strategy?

The Study Team has proposed an Identified Preferred Strategy to move forward at this time. The I-70 FTEIS Identified Preferred Strategy is the Improve Key Bottlenecks Strategy from the downtown loop to east of I-435. The Identified Preferred Strategy from east of I-435 to I-470 is either the Improve Key Bottlenecks Strategy or the Add General Lanes Strategy. Additional information and analysis is necessary and the determination of which strategy will be used will be made in the Second Tier studies. Figure 2.9 in Section 2.2 First Tier Strategies Development provides a graphic explaining

What are High Occupancy Vehicle (HOV) lanes?

HOV lanes are exclusive lanes for vehicles with two or more occupants. HOV lanes are physically separated by a barrier, striping, or signing from the adjacent regular lanes that are utilized by cars, buses, and freight trucks.

What is meant by Identified Preferred Strategy?

The Identified Preferred Strategy is the strategy that the Study Team has determined will best address the purpose for improving I-70 while minimizing the land-use, social, and environmental effects of the project. This does not mean the Identified Preferred Strategy has been selected as the final strategy. Draft **Environmental Impact** Statement (DEIS) comments received from agencies, the public, the project website, and the public hearing will be considered prior to selecting a final preferred strategy.

the Identified Preferred Strategy. The Transportation Improvement Corridor Strategy would be eliminated from consideration.

The Study Team selected the Improve Key Bottlenecks Strategy for the downtown loop to east of I-435 for the following reasons:

- It addressed the key reasons for improving I-70 as identified in **Chapter 1**.
- It reduces peak hour congestion to LOS E or better.
- It has the lowest need to acquire properties and relocations of homes and businesses, especially in the environmental justice areas for the Build Strategies.
- It has the lowest human and natural environmental impacts for the Build Strategies.
- It has the lowest estimated cost of the Build Strategies.
- It improves access across the freeway.
- It improves transit service with bus on shoulder.
- It restores and/or rebuilds the existing infrastructure.

Traffic analysis indicates a need for additional capacity on I-70 from east of I-435 to I-470, however, there are several factors that make this conclusion uncertain between now and 2030. The factors and issues leading to this decision include:

- Uncertainty in how much traffic levels are going to grow. With higher gas prices, there have been reductions in national and regional vehicle miles traveled in recent years.
- Uncertainty of the compatibility of the Add General Lanes Strategy with the sustainability goals of the Mid-America Regional Council's 2040 Long Range Transportation Plan update. If this plan results in a strategy for much more compact development, additional road capacity may not be needed.
- Uncertainty of the Add General Lanes Strategy compatibility with future regional transit plan investments such as a fixed guide way system. Improving capacity in the I-70 corridor could potentially be solved be either adding new lanes to I-70 or through regional transit improvements. However, a significant investment to both potential highway and

transit solutions is not necessary. If the region, supported by regional transit plans, concludes a significant transit investment would adequately address the traffic needs in the I-70 corridor, MoDOT, working with the region, would reevaluate the decision in the tiered environmental process.

- Potential federal climate change and vehicle emissions legislation. Congress is considering legislation that may focus transportation improvements on those that reduce driving instead of those that add capacity.
- Delaying the final improvement decision until the Second Tier studies will be a cost effective use of public resources given the uncertainties noted above. This strategy avoids committing to a solution that may be undesirable given future policy changes and thus requiring reopening this First Tier study.

The I-70 FTEIS will provide environmental evaluation for the wider of the two footprints (Add General Lanes Strategy) to ensure appropriate environmental impact analysis is conducted.

The Transportation Improvement Corridor Strategy using fixed barriers was eliminated from further consideration. The option to stripe a HOV/Bus lane will be carried forward with the Add General Lanes Strategy.

How will the Strategies Affect the Human Environment?

The following is a brief summary of some of the key environmental effects of the strategies. **Chapter 3** discusses the effects of the strategies in detail.

Land Use

Land uses within the Study Area include single-family residential, multi-family residential, commercial, industrial, office, mixed use, parks and open space, public/semi-public, and government.

What is meant by public/semi-public land uses?

A public space is open and available to all the citizens. Semi-public space has some stricter rules attached such as dress codes, advertising limits, entrance fee, or skateboards limitations to name a few.



Single-family Residential

What is meant by mixed use?

Mixed use is the combination of residential, commercial, industrial, office, institutional, or other land uses in a single building or set of buildings.

The No-Build Strategy would be consistent with local planning in the cities of Kansas City and Independence, Missouri. This strategy would have no affect on the existing land use and zoning.

The Improve Key Bottlenecks Strategy will have a minimal affect on the existing land use and zoning. It is relatively consistent with current and planned zoning and land use. Properties will need to be acquired along the corridor near existing bottlenecks; however, improvements will be made in existing right of way to the extent possible.

The Add General Lanes Strategy will affect commercial, residential, and other facilities with the expansion of I-70 to eight lanes, four lanes in each direction. As the improvements recommended as a part of the Add General Lanes Strategy are widespread throughout the Study Area, its impacts to land use and zoning are as well. The Add General Lanes Strategy is not consistent with current and planned zoning and land uses.



A Community Market

The Transportation Improvement Corridor Strategy will affect commercial, residential, and other facilities with the expansion of I-70 to include congestion managed lanes, HOV lanes, or bus lanes. As the improvements recommended as a part of this strategy are widespread throughout the Study Area, its impacts to land use and zoning are as well. The Transportation Improvement Corridor Strategy is not consistent with current and planned zoning and land uses.

The impacts of the Identified Preferred Strategy to land use and zoning will vary along the study corridor. The overall impacts could be reduced through the design process.

Section 3.1 Land Use and Zoning provides more details on land use affects.

Effects on Communities and Neighborhoods

Transportation projects can impact neighborhoods by relocating residents, dividing the neighborhood, removing local businesses, and creating an atmosphere that discourages neighbors from interacting with each other. MoDOT and

FHWA will work with local communities and neighborhoods to reduce and minimize neighborhood impacts as much as possible.

The No-Build Strategy will affect the neighborhoods surrounding the existing corridor as increased congestion will make it more difficult to live near I-70 and the downtown loop. Without improvements, local residents can expect increased congestion leading to increase noise and air quality issues. In addition, increased congestion will lead to the use of alternate routes which are often arterial roads through neighborhoods which will likely make travel more difficult for local residents.

The Build Strategies including the Identified Preferred Strategy will affect all neighborhoods surrounding the existing corridor to varying degrees. These effects include acquisition of homes, businesses, and community properties; increased noise and air quality issues, and visual effects on residents. However, the Build Strategies will also provide the opportunity to enhance bicycle and pedestrian facilities in the Study Area.

Section 3.2 Community and Neighborhood Effects provides more details.

Effects on Public Lands

Public lands and facilities include parks and community centers. Many public lands and facilities are protected by Section 4(f) of the Department of Transportation Act or Section 6(f) of the Land and Water Conservation Act.

The No-Build Strategy will have no affect on any of the public lands or facilities protected under Section 4(f) or Section 6(f).

All of the Build Strategies will potentially affect West Terrace Park, Ermine Case Jr. Park, Margaret Kemp Park, and Carriage Hills Park protected under Section 4(f). They will potentially affect Little Blue Trace Park protected under Section 6(f).

What are the Build Strategies?

Build Strategies involve the construction of roads, or other physical improvements. The Identified Preferred Strategy is a Build Strategy.

What is Section 4(f)?

Section 4(f) of the Department of Transportation Act of 1966 states that no transportation project should be approved which requires the use of land from a public park, recreation area, wildlife and waterfowl refuge, or historic site unless there is no feasible or prudent strategy to the use of such land.

What is Section 6(f)?

Section 6(f) of the Land and Water Conservation Act prohibits the conversion of any property acquired or developed with the assistance of the land and water conservation funds to anything other than public outdoor recreation use without the approval of the Secretary of the Department of Interior.

In addition, the Add General Lanes Strategy will potentially affect Jarboe Park, Andrew Drips Park, and Mulkey Square protected under Section 4(f).

The Transportation Improvement Corridor Strategy will also potentially affect Jarboe Park, Andrew Drips Park, and Cypress Park.

All of the Build Strategies will impact the Goin' to Kansas City Plaza located in the Paseo Boulevard median temporarily during construction.

The Identified Preferred Strategy will potentially impact three parks in the downtown loop area. The downtown parks include West Terrace Park, Ermine Case Jr. Park, and Margaret Kemp Park. The area known as Freeway Park is home to a community garden on land leased to the city of Kansas City from MoDOT. The Identified Preferred Strategy will use the area to reconfigure I-70 access to Truman Road. Depending on the selected strategy in the Second Tier studies, there are potential impacts to Carriage Hills Park and Little Blue Trace Park with the proposed I-470 interchange improvements. The parks are all Section 4(f) protected parks except the Little Blue Trace Park which is also a Section 6(f) protected park.

As this study continues into the Second Tier studies, reasonable attempts to avoid Section 4(f) and Section 6(f) properties will be made.

Section 3.3 Public Lands and Facilities provides more information.

Relocations of Homes and Businesses

The No-Build Strategy will require the relocation of some residences in the Study Area because of the programmed improvements to the U.S. 40 Interchange and the I-435 Interchange. The No-Build Strategy will not require any additional relocations other than those for existing planned projects.

All of the Build Strategies would require the relocation of homes, businesses, and community facilities within the Study



Margaret Kemp Park

Area. The Improve Key Bottlenecks Strategy would require the relocation of 170 single-family homes, 18 multi-family buildings, 55 businesses, and three community facilities. The Add General Lanes Strategy would require the relocation of 271 single-family homes, 32 multi-family buildings, 93 businesses, and 11 community facilities. The Transportation Improvement Corridor Strategy would require the relocation of 399 single-family homes, 45 multi-family buildings, 111 businesses, and 12 community facilities.

The Identified Preferred Strategy would require the relocation of 228 single-family homes, 19 multi-family buildings, 67 businesses, and four community facilities, based upon the widest strategy footprint carried forward. As a part of the Second Tier studies, the right of way for acquisitions will be refined to avoid relocations where possible and minimize the total number of properties acquired.

Section 3.4 Relocations provides more information.

Environmental Justice

Executive Order 12898 mandates that MoDOT identify and address disproportionately high and adverse human health or environmental effects of proposed projects on minority and low-income populations. An evaluation of the population characteristics for the proposed Build strategies identified that there are substantial clusters of Environmental Justice populations living within the Study Area. The highest concentrations of low-income and minority households are located in the area of the Study Area between downtown Kansas City, Missouri and I-435.

The No-Build Strategy will have no disproportionate and adverse affect on any segment of the population including minorities and low-income persons.

The Build Strategies may have adverse effects on minorities and low-income persons living along the corridor. The most likely impacts are expected to occur between downtown Kansas City, Missouri and the I-435 Interchange. These impacts may include relocations and increased noise.



Manchester Village Mobile Home Park

The Second Tier studies will make a final determination if there are potential disproportionate and adverse effects on minority and/or low income populations as well as suggested mitigation measures. Close attention will need to be paid to addressing potential impacts to Environmental Justice populations as part of all of the Second Tier studies, but especially those between downtown Kansas City, Missouri and I-435.

More detail on this analysis is contained in **Section 3.5 Environmental Justice**.

Economic Effects on Businesses, Jobs, and Taxes

Under the No-Build Strategy, the congestion, bottlenecks, and goods movement issues discussed in **Chapter 1** would not be addressed. The thousands of residents that use I-70 on a daily basis to commute to work would continue to experience worsening congestion on their daily commute. This would result in reduced or delayed access to jobs in the central parts of the Kansas City Area and a potential reduction in the attractiveness of downtown as a location for employment.

The No-Build Strategy may negatively affect jobs related to the trucking industry and businesses that rely on I-70 for product delivery. Congestion causes travel time delays for the transportation and delivery of goods. This costs businesses in the form of increased fuel usage, wages for drivers stuck in traffic, lost productivity of trucks, and a reduction in the number of daily trips that truck drivers can make.

The Build Strategies including the Identified Preferred Strategy would affect businesses and jobs in three key ways:

- By requiring businesses to relocate as part of the acquisition of new right of way
- By changing access near the location of specific businesses that could make it easier or more difficult for customers/workers to reach the business
- By improving travel times and goods movement for businesses and workers through reduced congestion

Environmental Justice Populations Defined:

Populations with a cluster(s) of minority and/or low-income populations.

In addition, each of the Build Strategies, including the Identified Preferred Strategy, would directly affect the tax base of the City of Kansas City, City of Independence, Jackson County, and local school districts by removing land from the property tax rolls. The Build Strategies would cause the relocation of homes which would represent a decrease in the available property tax base. The Build Strategies with a higher number of relocations would have the greatest negative effects on tax base.

Section 3.6 Economics provides more information.

Visual Effects

The overall view of the road and the view from the road will vary somewhat among the Build Strategies. However, the Study Area views are already well developed with urban residential and commercial uses. The overall views of the roadway and the views from the roadway will be comparable to the existing views although the opportunity exists to provide aesthetic enhancements throughout the corridor.

Section 3.7 Visual Effects provides more details.

Hazardous Materials

The potential for hazardous materials contamination from the five identified hazardous material sites in or adjacent to the Study Area is very low for all of the Strategies.

Section 3.8 Hazardous Materials provides more information.

Historic and Archaeological Resources

Several historic properties and districts border the Study Area. However, no historic bridges, properties, cemeteries, or properties potentially eligible for the National Register of Historic Places (NRHP) are located in the Area of Potential Effect (APE).

There are 18 known archaeological sites located immediately adjacent to the Study Area boundaries and nine potential



Southwest corner of loop looking at Downtown

What is the Area of Potential Effect (APE)?

The geographic area or areas within which a project may directly or indirectly cause modification in the character or use of cultural resources, if any exist. The area of potential effect is influenced by the size and nature of the project.

locations of unknown archaeological sites located within the Study Area. None of the strategies, including the Identified Preferred Strategy, will impact the known archaeological sites. The potential locations of unknown archaeological sites could be impacted by the Identified Preferred or the other Build Strategies. Further investigations for both historic properties and archaeological sites would take place as part of the Second Tier studies.

More information is contained in Section 3.9 Historic and Archaeological Resources.

Noise

The I-70 Study Area contains many noise-sensitive land uses, most of which are residential properties. If nothing is done to improve the congestion on I-70 within the Study Area, the No-Build Strategy may increase noise levels for existing residences and businesses along I-70 as traffic and congestion continues to grow over time.

The Build Strategies, including the Identified Preferred Strategy, are expected to increase noise levels. The areas likely to be impacted the most are locations along I-70 that have a high concentration of residences both single-family and multi-family. The Add General Lanes Strategy and the Transportation Improvement Corridor Strategy would relocate more homes and businesses than the other strategies.

As a part of the Second Tier studies, the construction area for the I-70 improvements will be better defined. The MoDOT Noise Policy will dictate the evaluation and assessment methods used as the project proceeds. If a selected strategy requires significant changes in horizontal or vertical alignment or an increase in the number of through lanes, then noise measurements and modeling will be completed and a preliminary assessment of needed mitigation will occur.

Section 3.10 Noise provides additional detail on the areas affected by noise for each strategy.

Energy

The No-Build Strategy will have an adverse affect on the consumption of energy. This strategy will not improve traffic flow and reduce vehicle fuel consumption. In fact, an increase in congestion will lead to more vehicle fuel consumption as vehicles are in stop and go traffic for a longer period of time.

The Build Strategies, including the Identified Preferred Strategy, decrease congestion and improve traffic flow which reduces energy consumption. Over time, improvements to vehicle emissions and fuel efficiency should reduce energy consumption in the corridor even further. Although the improved traffic flow is forecast to attract additional trips into the corridor and increase vehicle miles traveled, continued improvements in efficiency are expected to offset the increase in traffic volumes.

Additional information on the effects on energy use is contained in **Section 3.17 Energy**.

Utilities

The No-Build Strategy would not result in any utility impacts.

The Build Strategies, including the Identified Preferred Strategy, could cause temporary impacts in service utilities; however, temporary telephone and cable service impacts are the most probable. The more detailed design work of the Second Tier studies will allow for greater analysis in the affects on specific utility lines or utility corridors. Second Tier studies will preliminarily identify any needs for relocating utilities along the corridor.



Electrical Lines Across I-70

Section 3.18 Utilities contains more discussion.

How will the Strategies Affect the Natural Environment?

Air Quality

The No-Build Strategy will be the worst for air quality when compared to the any of the Build Strategies. This is due to an increase in traffic, congestion, and delays in the No-Build Strategy.

The Build Strategies, including the Identified Preferred Strategy, are expected to improve air quality by improving the existing locations which create congestion and stop and go traffic. The improved traffic flow will allow vehicles to move more efficiently. In addition, anticipated vehicle fuel mileage efficiency increases and emission reductions will also improve air quality over time. However, the Build Strategies are also forecast to have a moderate increase in the number of vehicles on I-70. Increase vehicle use along I-70 may negate some of the air quality benefits.

Section 3.11 Air Quality has more information.

Groundwater, Drainage, and Surface Water Quality

The proposed route for I-70 improvements is identical to the existing route. Consequently, the risks associated with any proposed improvement strategy include all the risks associated with the existing I-70 highway:

- Pollution of the river system as a result of fuel, oil, and debris carried from the road surfaces by storm water runoff.
- Exposure of the river system to airborne particulates and combustion gases from traffic.

The Build Strategies, including the Identified Preferred Strategy, will increase the impervious surface and increase rainwater runoff. This leads to increased amounts of water flowing into streams, especially during heavy rainfalls; less ground water flowing through the soil; and potentially more erosion of stream beds because of faster flowing water. These

What are airborne particulates?

Airborne particulates are any solid particle of dirt, dust, sand, water vapor, or other material that is suspended in the atmosphere.

What is an impervious surface?

Impervious surfaces are hard surface that prevents water from entering the soil.

What is sediment?

Sediment is small particles of dirt, dust, sand and other materials that are left behind on a surface after water flows over it. changes to stream flow can result in flooding; habitat loss; erosion, which widens the stream channel; and physical changes in how the stream looks and functions.

Movement of sediment and pollutants into the river system as a result of construction and demolition activities potentially will affect water quality and habitat during construction.

Section 3.12 Groundwater, Drainage, and Surface Water Quality provides more details.

Floodplains, Stream, and River Crossings

The potential for new floodplain encroachment and wider stream crossings exists for all strategies except the No-Build Strategy. The Study Area crosses regulated floodways at the Kansas River, the Missouri River, the Blue River, the Little Blue River, and their tributaries. The Improve Key Bottlenecks Strategy will potentially affect 19 acres of floodplain. The Add General Lanes Strategy will potentially affect 21 acres of floodplain and the Transportation Improvement Corridor will potentially affect 24 acres of floodplain. The Identified Preferred Strategy will potentially affect 20 acres of floodplain. The majority of the impacts (16 acres) will occur in the Blue River floodplain.

Section 3.13 Floodplains, Streams, and River Crossings provides more details.

Wetlands

The potential for wetland and habitat loss was measured by estimating the area of wetlands within the boundaries of the construction. Each of the strategies, except the No-Build Strategy, will affect wetlands. The Improve Key Bottlenecks Strategy will affect 1.38 acres of wetland. The Add General Lanes Strategy will affect 2.03 acres of wetland. The Transportation Improvement Corridor will affect 1.99 acres of wetland. The Identified Preferred Strategy will potentially impact 2.03 acres of wetlands using the widest footprint of the strategies carried forward. The potential to minimize wetlands impacts of the Identified Preferred Strategy will be examined in more detail in the Second Tier studies.

What is a floodplain?

A floodplain is the relatively flat land adjacent to a stream or river that experiences occasional or periodic flooding.



Little Blue River under I-70

What is a wetland?

Wetlands are areas where water covers the soil, or is present either at or near the surface of the soil all year or for varying periods of time during the year.

Section 3.14 Wetlands contains more details.

Wildlife, Plants, and Threatened and Endangered Species

The Study Area does not offer any pristine or unique habitat for wildlife and no state or federal threatened, endangered, or special concern plant or animal species were found within the Study Area. Wildlife species that exist within the Study Area are tolerant of human activities and if disturbed could find comparable habitat in areas adjacent to the Study Area.

The Build Strategies including the Identified Preferred Strategy will impact some forested areas present in the Study Area.

Section 3.15 Wildlife, Plants, and Threatened and Endangered Species provides more information.

Farmland

There are no farmlands located within the Study Area.

How did the Study Team Coordinate with the Public and Stakeholders?

MoDOT developed a detailed <u>Public Involvement and Agency Coordination Plan</u> specifically for the I-70 FTEIS. The plan was circulated to potential participating agencies for review and comment. The plan was also posted on the project website for public review and comment. The plan has been updated on the website as needed during the course of the study. Detailed discussion of how MoDOT involved the Public and Stakeholders is contained in **Chapter 4**.

Agency Meetings

MoDOT has held six regular meetings with representatives from local stakeholder agencies such as:

• City of Independence, Missouri

What are participating agencies?

The most recent major federal transportation legislation, SAFETEA-LU, included two types of agencies for specific involvement in the preparation of environmental studies.

Cooperating Agencies are federal and state agencies with a specific expertise or authority (such as needing to issue a permit) for the project. There are no Cooperating Agencies currently designated on this project.

Participating Agencies are a wider group of government stakeholders. All federal, state, regional, and local government agencies that may have an interest in the project are invited to serve as participating agencies.

- City of Kansas City, Missouri
- Kansas City Area Transportation Authority (KCATA)
- Mid-America Regional Council (MARC)

Stakeholders provided feedback on the strategies as they were developed and refined.

MoDOT also held two meetings with environmental agencies to discuss the environmental analysis procedures for the project and the anticipated affects of the project on the environment.

Public Information

MoDOT developed several ways for members of the public to learn more about the project. These included a project web site, a project phone number, project newsletters, a speaker's bureau, public meetings and listening posts, and other project interactive activities.

Public Meetings

MoDOT held two rounds of public outreach prior to the publication of this DEIS. All meetings were held in an open house format for two to three hours and members of the public could stop by at any time during the meetings. The first round of public outreach was held during September 2008, which included two weekday evening open house public meetings and two Saturday morning neighborhood coffee meetings. The second round of public outreach was held in January 2009, which included an on-line public meeting and an open house public meeting.



September Public Meeting

Mobile Meetings

In addition, MoDOT vinyl wrapped an existing 12-passenger van, provided a display tent, and backdrop to share information about the First Tier strategy packages with the community. The van was stationed for two hours at the following key events: December 21, 2008 Chiefs Football Game and the Wal-Mart Super Center on Blue Ridge Boulevard in Independence, Missouri on January 9, 2009. The



Mobile Voice Van Event

Study Team circulated through the event location to speak with community members about the project and distributed "Contact Us" business cards.

Speakers Bureau

MoDOT also established a speaker's bureau for the project. Study Team members are available to attend neighborhood, business, and community organization meetings by request. The Study Team sent an invitation letter to more than 30 organizations along the corridor inviting them to request a speaker. The Study Team also posted a speaker's bureau request form on the project website. As of June 2009, Study Team members have presented at seven community group meetings.

How Do I Comment on This Document and the Strategies?

A public comment period of no less than 45 days will follow the publication of this Draft FTEIS document. During the comment period, MoDOT will hold a formal Public Hearing. MoDOT will also hold a series of Mobile Meetings, host an on-line presentation, and attend further speaking engagements. The public and stakeholders can participate through any one of these events or send comments on this Draft FTEIS and the strategies to the addresses listed on the first page of the document.

What are the Next Steps for Improving I-70?

Following the Public Hearing and comment period, the Study Team will use the input provided by the public, stakeholders, and agencies to help refine the Identified Preferred Strategy. The Study Team will produce a Final FTEIS document that updates the Identified Preferred Strategy and addresses the comments received. The FHWA will then issue a Record of Decision that will formally select the strategy to move forward into the Second Tier studies.

For the Second Tier studies, the I-70 FTEIS Study Area will be divided into Sections of Independent Utility for a more manageable, in-depth evaluation process. The Second Tier studies will refine the right of way affected by the project in order to avoid, minimize, or mitigate the effects of the I-70 improvements where possible.

There are issues that do not affect the selection of the Identified Preferred Strategy but will need to be resolved as part of the Second Tier studies or subsequent design development. MoDOT is committed to the continued pursuit of resolving these issues. By virtue of the tiered process, a number of issues, mostly due to the conceptual nature of the definition of the FTEIS I-70 improvements, remain for consideration in the Second Tier studies.

Although the first tier process has laid the foundation for the continued study of the I-70 corridor and the downtown loop, there are several issues that remain unresolved that will need to be further clarified prior to or in conjunction with the initiation of the Second Tier studies. These unresolved issues include the following items:

- Type of environmental study for each section of independent utility
- Implementation schedule for I-70 improvements

MoDOT is committed to performing the Second Tier studies in accordance with the recommendations contained within this First Tier EIS. These Second Tier studies will be conducted through a continued and ongoing program of public outreach and agency coordination. Through the Second Tier studies, more specific definitions of the improvements will be developed for consideration by the general public and the various environmental and community resource agencies. The Second Tier studies will assess and study more specifically the following items:

Corridor Wide

- Layouts and impacts of the interchange improvements to address ramp lengths, merge and diverge lengths, and weave areas.
- Air Quality designation status throughout the MARC region.
- Relationship between the MARC's regional long range transportation plan update (Transportation Outlook 2040) and I-70 FTEIS identified preferred strategy.
- Locations and types of Community Bridges.
- Noise studies as directed by MoDOT's Noise Policy.
 Noise was a specific issue brought forward as a potentially controversial issue from the public and stakeholder outreach efforts.
- U.S. Army Corps of Engineers Section 404 permitting will be required on this project.

Downtown Sub-Area

- Layouts and impacts of the interchange additions, consolidations, or eliminations throughout the downtown loop.
- Location and need to replace the Wyandotte ramp to westbound I-670.
- Coordination and impact of the South Loop Link Study

Urban Sub-Area

 Layouts and impacts of the interchange additions, consolidations, or elimination of access at 18th Street interchange.

I-435 Interchange Sub-Area

• Layouts and impacts of the interchange improvements at the I-435 interchange including modification of access at Manchester Trafficway interchange.

Suburban Sub-Area

• Layouts and impacts of the interchange additions, consolidations, or elimination of access through the series of interchanges at the Sterling Avenue, U.S. 40, and Blue Ridge Boulevard interchanges.

<u>I-470 Interchange Sub-Area</u>

• Layouts and impacts of the interchange improvements at the I-470 interchange.

Purpose and Need

This chapter discusses the basic information for the I-70 First Tier Environmental Impact Statement (FTEIS) including what the project is about, where it is located, and why improvements are needed to I-70 on the Missouri side of the Kansas City Metropolitan Area (KC Metro).

What is the I-70 First Tier Study About?

The Missouri Department of Transportation (MoDOT) and the Federal Highway Administration (FHWA) are proposing to improve the I-70 corridor from the Kansas state line to east of I-470. The National Environmental Policy Act (NEPA) process promotes efforts that prevent or minimize impacts to the human and natural environment in considering projects like The FTEIS is the primary NEPA improving I-70. environmental documentation that evaluates the social, economic, and environmental effects of the improvement strategies for I-70. The I-70 FTEIS in KC Metro is following a tiered process consisting of a First Tier and multiple Second Tier environmental studies and documents. Generally, First Tier documents address the transportation problems to be solved and potential corridor improvement strategies in an initial, higher level environmental impact analysis. First Tier documents frame and narrow the boundaries and scope for future, smaller Second Tier studies. The Second Tier environmental document process will occur after this study is complete and will likely consist of several documents based on logical termini and independent utility for sections of the corridor.

As a result of the First Tier process, the Study Team will seek the following outcomes:

- Approval of a Preferred Strategy for improving I-70 in KC Metro including a plan for prioritizing improvements.
- Identification of portions of I-70 that can be considered "sections of independent utility" (SIU) for analysis in future Second Tier studies.

What is a Purpose and Need?

A Purpose and Need identifies the reasons a proposed project is needed.

What is meant by improvement strategies?

Improvement strategies are general, high level transportation improvement opportunities to address transportation issues, such as traffic congestion, existing pavement, bridge, and interchange ramp deficiencies, and/or insufficient transit projects.

What are logical termini?

Logical termini are rational beginning and ending points for a transportation improvement and for a review of the environmental impacts.

What is a SIU?

A Section of Independent Utility (SIU) is a section of a larger project that can function on its own, without further improvements to adjoining road sections.



Illustration of the Tiered Environmental Process. The First Tier Study covers a corridor that will be broken down into multiple future Second Tier environmental studies.

- Environmental documentation that can be referenced by Second Tier studies and reduce the amount of duplication between studies.
- Public and agency consensus and understanding around the overall improvement plan.

What is the I-70 FTEIS Study Area?

The I-70 FTEIS Study Area is located entirely in Jackson County, Missouri and includes all land within 100 feet on either side of the existing highway right-of-way along the corridor and within 300 feet of the existing highway right-ofway at interchanges on I-70. This project on I-70 is approximately 18 miles long and extends from the end of the last ramp east of the Missouri and Kansas state line to east of the I-470 interchange, including the Kansas City, Missouri downtown loop. An expanded Study Area consisting of 1,000 feet on either side of the highway including the downtown loop is being evaluated for land use and socioeconomic studies. For most of this length, I-70 is a four- or six-lane divided and fully access-controlled interstate highway. The I-70 FTEIS Study Area is shown in Figure 1.1 at the end of this chapter.

I-470 was determined to be the eastern logical termini for the I-70 FTEIS for a number of reasons. I-470 is a major interstate in the Kansas City region, the I-70 statewide study used I-470 as its termini which reduces study overlap, and a purpose and need study is being conducted on I-470.

On the west end of the Study Area, the I-70 FTEIS extends to the last ramp east of the Missouri and Kansas state line and includes the entire Kansas City downtown loop. The downtown loop as the logical termini was determined due to the number of interstate and freeway connections to downtown loop and the complex interrelatedness of the entire loop.

Why is I-70 in KC Metro Important?

The 18 mile I-70 corridor and the entire downtown loop are vital to serving regional transportation demands including commuters, transit, and freight movements. In addition to

serving regional needs, I-70 in the Kansas City metropolitan area is also the main artery for traffic traveling to and from other cities and places across the state and nationally. Some of the I-70 traffic traveling through Kansas City is bound for major cities and towns in Missouri and other adjacent states of Kansas, Nebraska, Iowa, and Illinois.

What Studies Were Completed for the I-70 Corridor before the FTEIS?

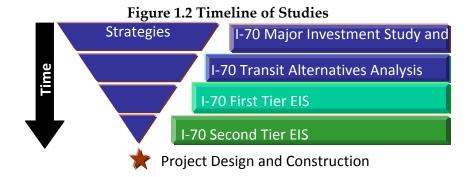
The need to improve the I-70 corridor and the adjoining transportation system has been identified by numerous studies. The following discusses previous and/or current studies that involve the I-70 corridor.

In 2000, MoDOT, the Mid-America Regional Council (MARC), and the Kansas City Area Transit Authority (KCATA) began the I-70 Major Investment Study (MIS) to evaluate the challenges and opportunities associated with I-70 in Jackson County. The I-70 MIS involved a planning process to evaluate long-term transportation needs in the I-70 corridor. The purpose of the MIS was to identify the challenges, needs, goals, and objectives for the corridor as well as develop and analyze potential major transportation improvement strategies. The I-70 MIS was completed in November 2004.

The I-70 Transit Alternatives Analysis, prepared by MARC in June 2005, supplemented the I-70 MIS by providing additional detail on transit alternatives. The purpose of the I-70 Transit Alternatives Analysis was to provide mechanism for the local residents to identify a locally preferred transit strategy within the corridor. The results of this study are also a part of the strategies for the FTEIS. **Figure 1.2** displays the series of studies leading up to the I-70 First Tier EIS and the studies to follow.

What does Multi-modal mean?

Mutli-modal refers to the different modes of transportation including walking, cycling, public transit, and automobile.



In January 2007, MoDOT completed a Final Environmental Impact Statement (FEIS) that evaluated the potential impacts of the improvements to the I-29/I-35 corridor from Missouri Route 210 south over the Missouri River and to the northwest corner of the downtown loop. The Selected Alternative consists of adding capacity to the existing I-29/35 roadway and bridge corridor from the northern terminus at M-210 to a connection with the existing downtown loop - the southern terminus. Included in the Selected Alternative is an improvement of the crossing over the Missouri River and modifying the corridor's connection to the downtown loop and connection of the Broadway Extension (US 169) with the downtown street and freeway loop system. The northern side of the downtown loop, designated as I-35/70 and US 24/40, is included in the Selected Alternative¹. The results of this study will be considered in the second tier studies.

In addition, MoDOT completed the I-70 Supplemental Environmental Impact Statement (SEIS) from I-470 in the Kansas City area to the Lake St. Louis interchange in the St. Louis area, receiving a Record of Decision in August 2009. The I-70 SEIS evaluated if and how truck-only lanes alter the social and environmental impacts and recommendations previously identified through the Improve I-70 EIS process. The study was conducted because of the high numbers of trucks entering and exiting I-70; to determine the ability of connecting roads and communities to accommodate heavy truck traffic; to assess the additional social and environmental impacts; and to determine the connectivity to multi-modal centers.² The results of the I-70 SEIS have been coordinated

¹ FHWA-MO-EIS-06-01-F Record of Decision

² MoDOT Improve I-70 Supplemental Environmental Impact Statement Spring 2008

within the I-70 FTEIS. The I-70 SEIS concluded truck only lanes would transition into general purpose lanes east of I-470 and additional truck traffic will not divert to I-70 with dedicated truck lanes only on the 200 miles across Missouri.

Why are Improvements needed along I-70 in KC Metro?

The overall purpose for studying I-70 is to determine an improvement strategy for the corridor that is consistent with MARC's Long Range Transportation Plan (LRTP) policy goals and environmental constraints. The I-70 FTEIS is in MARC's 20010-2014 Transportation Improvement Program. Full details on the reasons why improvements are needed to I-70 are found in the Purpose and Need Technical Memorandum located in **Appendix B.** The improvement strategy will address the following items:

- <u>Improve Safety:</u> Reduce crash rates and crash severity on I-70 and the downtown loop.
- <u>Reduce Congestion:</u> Remove key bottlenecks; reduce the potential for ramp back-up onto the freeway; and improve multi-modal travel times in coordination with plans put forward by local and regional agencies.
- Restore and Maintain Existing Infrastructure: Improve bridge and pavement conditions on I-70 and the downtown loop and implement cost-effective investment strategies.
- <u>Improve Accessibility:</u> Provide travel options for all residents; increase safe access across I-70 and the downtown loop for non-motorized travel; support local and regional land use plans.
- <u>Improve Goods Movement:</u> Improve the efficiency of freight movement on I-70 and the downtown loop.

Each of the above elements of the purpose and need for improvements is discussed in more detail in the paragraphs below.

What is a bottleneck?

A bottleneck is a section of a road where movement of traffic is limited by the road design. This is often a section of road with a fewer number of lanes, a sharp curve, or traffic joining the road at an interchange. A bottleneck is the most vulnerable point for congestion in a road network and is also referred to as a chokepoint.

Improve Safety

Improving safety within the I-70 FTEIS Study Area must be a key element of improvement strategies. Traffic crashes cost the travelers of I-70 in a variety of ways. Some crashes cost lives, cause severe injury, or result in property damage. Traffic crashes also create congestion from blocked travel lanes resulting in increased gas consumption and lost time. Improvements to I-70 must work to reduce the crash rates compared to the statewide average and to reduce the crash severity.

Crash data were obtained from MoDOT from 2003 to 2007. In the five year period 2003 to 2007, 20 crashes within the Study Area involved a fatality. The locations of those fatal crashes are shown in **Figure 1.3**.

Figure 1.3: Fatal Crash Locations in the Study Area 2003 to 2007

The locations with the highest crash rates between 2003 and 2007 are the downtown loop, westbound from the Benton curve to the downtown loop, eastbound from the Jackson curve to I-435, and at the I-435 interchange.

The locations identified above are defined as undesirable because the crash rate exceeds 150 percent of the statewide average rate of 107.82 crashes per 100 million vehicle miles of travel. The downtown loop and the locations around the Benton and Jackson curves have noticeably higher crash rates compared to the statewide crash rate.

The majority of all crashes in the Study Area are rear end (53%) followed by passing (18%) and out of control (17%). Rear end collisions often occur in congested areas as drivers fail to slow down in time for slow moving traffic.

Table 1.1 Crash Types on I-70 (2003 -2007)

Crash Type	Number	Percent
Rear End	3,079	52.6%
Passing	1,036	17.7%
Out of Control	976	16.7%
Other	766	13.0%
Total	5857	100.0%

Approximately 78 percent of the total crashes cause property damage only and approximately 22 percent cause injury. Approximately 77 percent of all crashes occur in daylight conditions and approximately 81 percent occur on dry pavement conditions. Approximately 30 percent occur during the weekday peak period of traffic (7-9 a.m. and 4-6 p.m.), which has the largest effect on delay for motorists.

Reduce Congestion

The way the quality of service on a roadway is measured is by the Level of Service (LOS). The general level of service descriptions are described as:

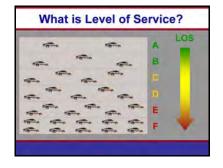
- LOS A represents free flow.
- LOS B is in the range of stable traffic flow at free flow speeds, but the presence of other users in the traffic stream begins to be noticeable.
- LOS C is in the range of stable traffic flow at free flow speeds, but marks the beginning of the range of flow in which the operation of individual users becomes



I-70 Eastbound at Lister

What is Level of Service Analysis?

Level of service (LOS) is a measure by which transportation planners determine the quality of service on roadway. The transportation LOS system uses the letters A through F, with A being best and F being worst.





LOS C or D towards the viewer and LOS A away from the viewer

- significantly affected by interactions with others in the traffic stream.
- LOS D represents high-density, but stable traffic flow with slight declines in the travel speed.
- LOS E represents operating conditions at or near the capacity level with noticeable declines in travel speed.
- LOS F is used to define forced or breakdown flow.

In regard to the quality of service on the I-70 corridor, traffic growth on I-70 and the downtown loop is the result of population and economic growth in the Kansas City area and growth in trips through the region by cars and trucks. The Kansas City area has experienced population growth of 28 percent between 1970 and 2000 with expectations of an additional 21 percent growth in population by 2030 based on forecasts by the Census Bureau and MARC. Jackson County population growth is expected to be near nine percent between 2000 and 2030. Within the Study Area, population growth is focused around Independence and further east in Blue Springs.

Commuter traffic in the study corridor is highly directional with the majority of traffic destined towards the Kansas City downtown loop during the morning and away from the downtown loop during the afternoon peak periods.

A level of service (LOS) analysis was completed and shows that relatively severe congestion exists in the I-70 corridor during periods with high commuter traffic. This analysis shows that much of this congestion is likely caused by substandard merge, diverge, and weave areas. In addition to improving the merge, diverge, and weave sections in the corridor, basic capacity enhancements (e.g., lane additions) may be required to address the existing needs.

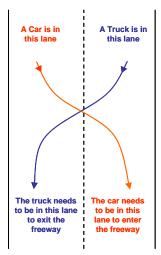
Certain specific locations that appear to be major corridor bottlenecks are as described below:

Downtown Loop: The downtown loop is congested in the peak hours due to lane balance issues requiring lane changes, closely spaced interchange ramps, and short weaving sections between interchanges. The incoming AM peak is a bottleneck largely because of

What is lane balance?

A lane balance issue occurs when the number of through lanes on the highway changes, usually as a result of a lane drop. An example of this is I-70 westbound at I-435.

What is a weaving section?



The car and truck must cross the other traffic to get to the lane they want to be in.

the congestion from I-670. The outgoing PM peak experiences congestion in the northeast corner of the downtown loop due to a lane drop at Prospect Avenue. There are four incoming lanes from the downtown loop but only three outgoing lanes east of Prospect Avenue.

- <u>Benton and Jackson Curves:</u> These curves have poor interstate operations due to existing sight distance and geometrics of the roadway. These are areas of higher than average crash rates.
- <u>I-435</u>: I-70/I-435 interchange experiences congestion in the AM peak period in the westbound direction and in the PM peak period in the eastbound direction due to lane balance issues requiring lane changes, closely spaced interchange ramps, and short weaving sections within the interchange. This is caused by lane drops through the interchange and steep grades on I-70 leaving the interchange.



Lane Drop at the I-435 Interchange westbound

• <u>I-470</u>: At the I-70/I-470 interchange congestion tends to occur on I-470 and not on I-70 including short merge, diverge and weaving sections on I-470 north and south of I-70. The issues are related to the closely spaced I-470 interchanges. This congestion affects traffic flow onto and off of I-70.

What is a lane drop?

A lane drop is a reduction in the number of lanes on the roadway. Lane drops are most common within interchanges in the form of an exit only lane.



Weave area on WB I-70 between 23rd and 18th Streets

Measuring Existing Congestion

The Study Team used 2005 traffic data to calculate the levels of services for basic freeway sections, ramp merges and diverges, and weaving sections. This analysis allowed the Study Team to identify which sections of the Study Area with the worst congestion. The analysis results are in **Appendix D**.

The Study Team has set a LOS goal for the peak hour analysis of LOS E in 2030 for the improvement strategies. The existing LOS conditions are described as follows:

<u>Downtown Loop</u>: The existing congestion levels through this section, both eastbound and westbound, is either undesirable or approaching undesirable conditions. The levels of service for the basic freeway sections, weaving sections, and ramps are in the range of LOS D and LOS F. As traffic volumes increase by 2030, the travel conditions and level of service are expected to worsen if there are no improvements.

<u>Downtown Loop to Jackson Curve</u>: The existing traffic congestion through this section, both eastbound and westbound, is currently undesirable. The levels of service for the basic freeway sections, weaving sections, and ramps are predominantly in the range of LOS E and LOS F. Improper lane balance, Benton Avenue curve, and close interchange spacing contribute to the capacity problems in this section. Traffic volumes and congestion are expected to increase by 2030 without any improvements.

<u>Jackson Curve to I-435</u>: The existing congestion levels through this section, both eastbound and westbound, is either undesirable or approaching undesirable conditions. The levels of service for the basic freeway sections, weaving sections, and ramps are in the range of LOS D and LOS E. By 2030, the traffic volumes are expected to grow with increased congestion without any improvements.

<u>I-435</u>: The congestion levels in both directions through the I-435 interchange are undesirable, with levels of service predominantly in the range of LOS E and LOS F. Much of this congestion is due to dropping lanes as I-70 traffic exits to I-435 and traffic merging on and off I-70. There are some planned



I-70 Eastbound at the Jackson Curve



Westbound I-70 at the Benton Curve

interchange improvements to reduce congestion through this section. As traffic volumes increase by 2030, the travel conditions and level of service are expected to worsen if there are no improvements.

<u>I-435</u> to <u>East Project Terminus</u>: The existing congestion levels through this remaining section of the project corridor are either undesirable or approaching undesirable conditions. The levels of service for the basic freeway sections, weaving sections, and ramps are in the range of LOS C and LOS E. As traffic volumes increase by 2030, the travel conditions and level of service are expected to worsen if there are no improvements.

Congestion and Transit Service: Traffic growth and congestion in the I-70 corridor affects bus service that operates on I-70. Currently, travel options along the I-70 corridor include primarily motor vehicles along with limited transit opportunities. There are currently three fixed bus transit routes that use I-70 between downtown Kansas City, Independence, Blue Springs, and Lee's Summit. With the limited options, the majority of travel is done by passenger vehicles. Enhanced modal options in the corridor could have the potential to shift some traffic away from passenger vehicles and thus reduce congestion and environmental impacts such as air quality.

Restore and Maintain Existing Infrastructure

Constructed in the early 1960s, I-70 has outlasted its original design life of 20 years and has carried traffic volumes of both cars and heavy trucks that have far exceeded original expectations. Since the original construction, some interstate design standards have been revised and now leave I-70 with undesirable design features. Improvements proposed as part of the I-70 FTEIS needed to modernize the freeway include both pavement and bridge updates.

Improve Accessibility

Often major linear features such as rivers and transportation corridors act as barriers to pedestrians, bicyclists, and those without motor vehicles. The I-70 FTEIS aims to reduce the



Pedestrian bridge east of Van Brunt Boulevard

barriers to non-motorized travelers by improving connections across I-70 and the downtown loop.

Crossing I-70

The Study Area has 49 bridges and underpasses crossing the freeway which provide opportunities to enhance bicycle and pedestrian accommodations to these structures. Some I-70 bridges and underpasses are connected to interchanges while others only provide access across the freeway. In either case, it is important to provide crossing opportunities for the pedestrians and bicyclists. To supplement the numerous roadway crossings of I-70, there are two pedestrian bridges – one east of the Van Brunt Boulevard interchange connecting at Oakley Avenue and the second east of the Jackson Avenue interchange connecting at Cypress Avenue. The Cypress Avenue pedestrian bridge connects Cypress Park on the south side of I-70 to the residential neighborhood to the north of I-70. The majority of the bridges and underpasses have sidewalk accommodations on at least one side of the street.

Bicycle Facilities

Metro Green Plan developed by MARC identifies a regional bicycle/trail plan for the region. The Kansas City Area has not yet completed the recommended regional network of interconnected bicycle facilities. There are various bicycle lanes and paths available throughout the Study Area, but non-motorized transportation system improvements, along the I-70 corridor or paralleling the corridor, are still needed. Individual projects have been constructed to various standards, some of which offer potential for future inclusion as part of a comprehensive regional bikeway system.

Transit Center

A common pick-up/dropoff location served by multiple transit routes. The transit center in downtown Kansas City is located at 10th and Main Streets.

Transit Routes

KCATA fixed transit routes that parallel or cross I-70 use the city road network. More than 55 KCATA transit routes cross I-70 or the downtown interstate loop as they provide radial service from the transit center in downtown Kansas City. Within the I-70 Study Area, there is one Park and Ride lot at I-70 and Blue Ridge Boulevard. In addition, 8.35 percent of the households in census block groups adjacent to the I-70 Study

Area have no vehicles available. West of I-435, there are 13.29 percent of households in census block groups adjacent to the I-70 Study Area have no vehicles available. East of I-435, there are 3.23 percent of households adjacent to the I-70 Study Area without a vehicle. This indicates that transit, bicycle routes/trails, and pedestrian facilities are an important aspect of the I-70 corridor.

Improvement of accessibility across I-70 for pedestrians, bicyclists, and those without motor vehicles is needed to serve and support the wide variety of land uses adjacent to the freeway.

Improve Goods Movement

Kansas City's mid-continent location makes the region a key location for the movement of goods. National cargo passes through the region by truck, rail, water, and air. Trucks are an important component of the traffic stream in the I-70 corridor. Approximately 11 percent of the vehicles in the corridor are trucks. During the AM peak hour, there are over 350 trucks on I-70 west of I-435 and around 500 trucks use I-70 east of I-435. There are over 380 trucks west of I-435 and over 670 trucks east of I-435 on I-70 during the PM peak hour. By 2030, there are expected to be 20 percent more trucks on I-70 during the AM and PM peak hours.

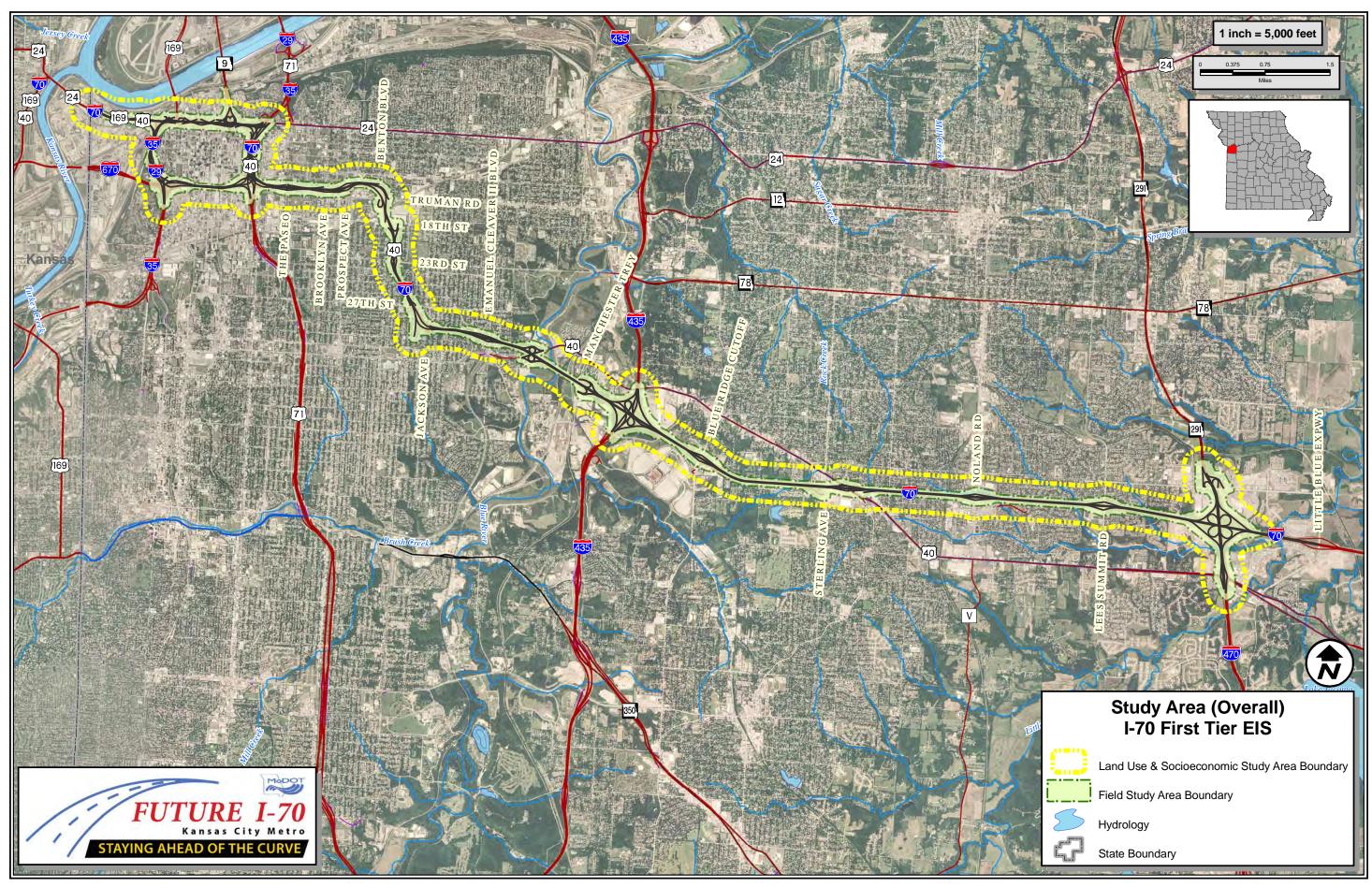
I-70, I-35, I-29, and U.S. 71 are the primary truck routes in the region. Shipments of local goods often use the interstate system to distribute goods from the manufacturer to the warehouse or from the warehouse to the store. The I-70 FTEIS improvements need to support goods movement by providing less congested, more reliable travel. This will lead to improved freight travel times and reduced operating costs for moving goods.

Summary

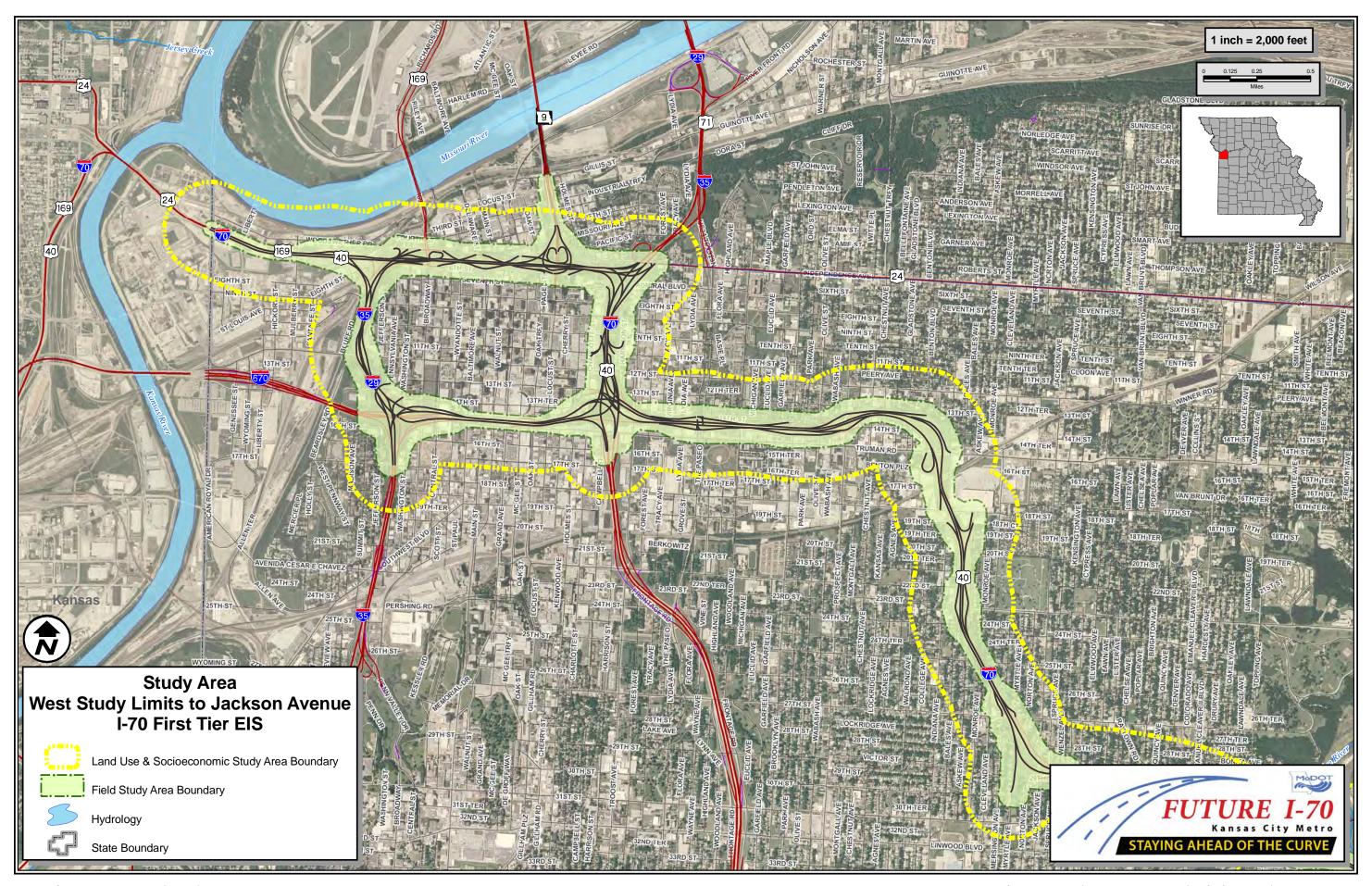
The purpose of the I-70 FTEIS is to determine an improvement strategy for the corridor, including future capacity and mode choices, that addresses the key needs outlined in this document. These five key purpose and need goals are:

- Improve Safety
- Reduce Congestion
- Restore and Maintain Existing Infrastructure
- Improve Accessibility
- Improve Goods Movement

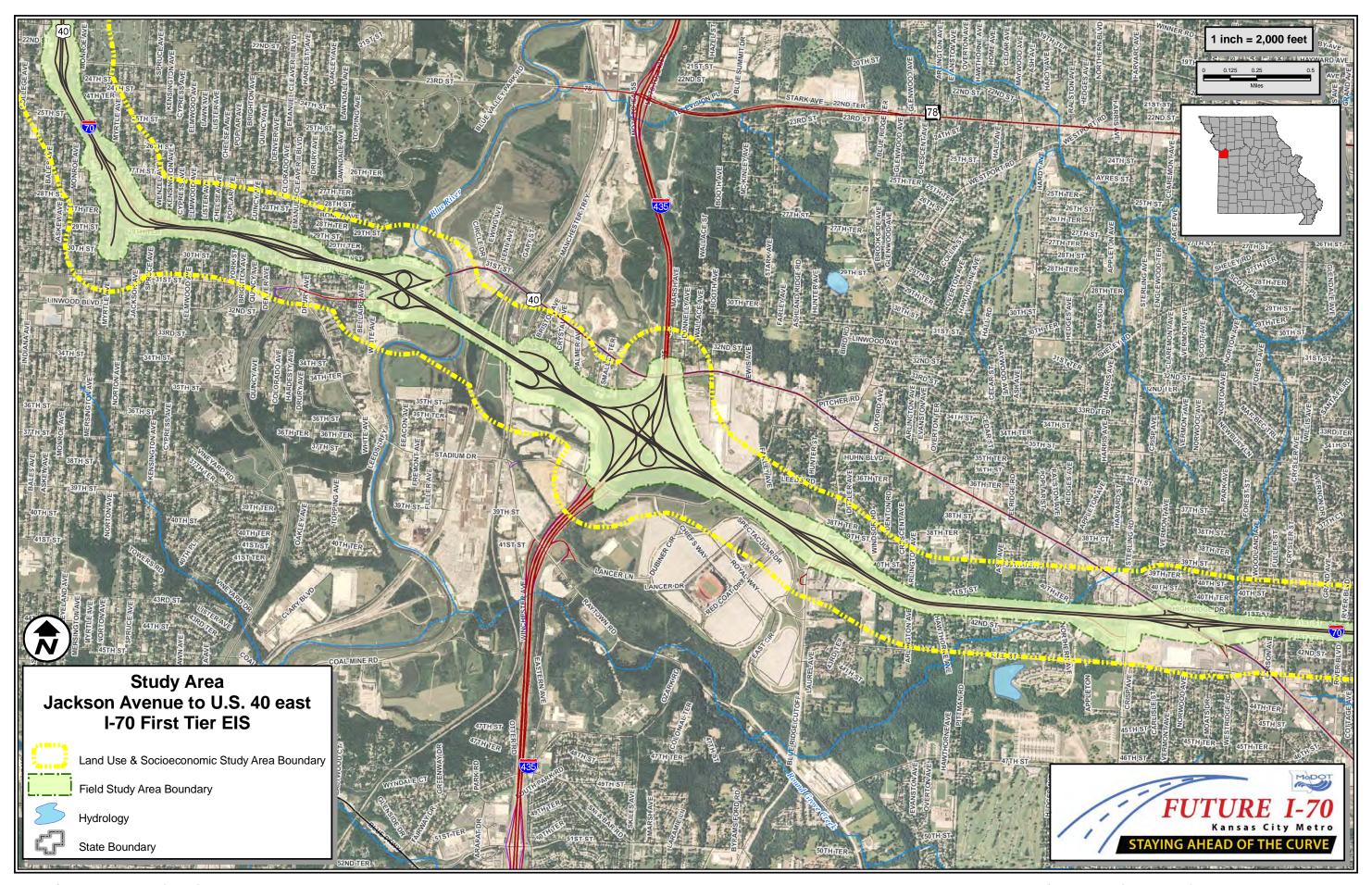
The Study Team developed, refined, and evaluated potential I-70 corridor strategies based on the needs outlined in this document while seeking to minimize impacts to the human and natural environment. This development, refinement, and evaluation of the strategies are discussed in the following chapters of this FTEIS.



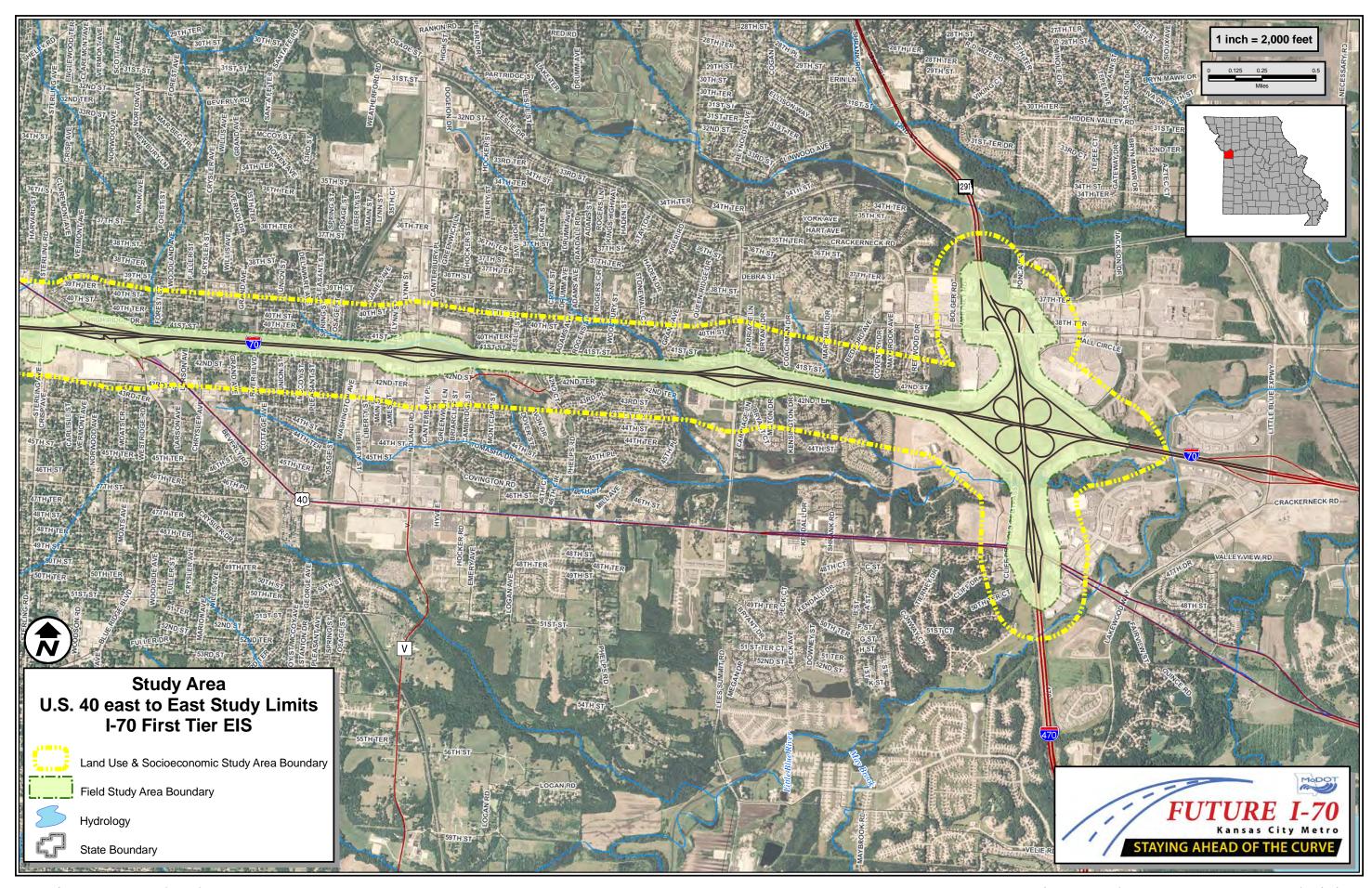
Draft EIS - Purpose and Need Figure 1.1 Study Area - Overall



Draft EIS - Purpose and Need Figure 1.1 Study Area - West Study Limits to Jackson Avenue



Draft EIS - Purpose and Need Figure 1.1 Study Area - Jackson Avenue to U.S. 40 east



Draft EIS - Purpose and Need Figure 1.1 Study Area - U.S. 40 east to East Study Limits

Alternatives Considered

This chapter discusses the potential concepts and strategies for improvements to the I-70 FTEIS Study Area and how the Study Team developed, refined, and analyzed the strategies over the course of the study.

This chapter begins with a discussion of the concepts and initial strategies that were considered during the early part of the study in Section 2.1 Initial Strategy Development. The next part of this chapter, Section 2.2 First Tier Strategies **Development**, discusses the process used to narrow the initial strategies down to four First Tier Strategies and discusses the No-Build and three Build strategies carried forward for more detailed analysis. Section 2.3 First Tier Strategies Traffic Modeling discusses how the traffic model was developed and used for analysis. Section 2.4 Evaluation Process for First Tier Strategies discusses the more detailed evaluation process of the four First Tier Strategies. Section 2.5 The Identified Preferred Strategy discusses why the Study Team has identified the Improve Key Bottlenecks Strategy (in the downtown loop to east of I-435) and either the Improve Key Bottlenecks Strategy or the Add General Lanes Strategy between east of I-435 and I-470.

2.1 Initial Strategy Development

This section discusses how the Missouri Department of Transportation (MoDOT) and the Federal Highway Administration (FHWA) worked with the local agencies, stakeholders, and the public to develop, refine, and evaluate potential strategies to improve I-70 and the downtown loop. The Study Team presented a wide set of concepts to the local agencies, stakeholders, and the public for improving I-70. The improvement concepts included such ideas as:

- Telecommuting
- Carpooling
- Incident management practices
- Bus/rail transit

What is a concept?

A concept is a single idea for solving a transportation issue in the I-70 corridor. Several concepts joined together make an improvement strategy.

What is meant by improvement strategies?

Improvement strategies are general, high level transportation improvement opportunities to address the transportation issues along I-70. Improvement strategies may include a series of specific transportation improvements concepts such as adding lanes, fixing existing pavement and bridges, improving interchange ramps, and transit improvements.

What is a First Tier Strategy?

A First Tier Strategy is one of four strategies that is carried forward from the 15 initial strategies for more detailed evaluation.

What was the I-70 Major Investment Study (MIS)?

The I-70 MIS was a study to evaluate the long-term transportation needs in the I-70 corridor. The MIS also developed and analyzed potential major transportation system improvement strategies. The I-70 MIS was completed in 2004.

What is Transportation System Management (TSM)?

TSM is a series of programs and efforts to improve the existing roadway operations. Some examples include Motorist Assist and Kansas City Scout.

What is Transportation Demand Management (TDM)?

TDM is a series of programs and efforts to reduce the demand for using the roadway. Examples include carpooling, alternative work hours, and telecommuting.

What is Amendment 3?

Amendment 3 was a constitutional amendment that limited the amount of highway user fees, such as fuel tax, vehicle license fees, and vehicle registration fees that were paid to other state agencies.

- Improving roadway design
- Adding capacity on bridge structures
- Adding capacity in a tunnel

Chapter 4 identifies the local agency, stakeholder, and public involvement processes used throughout the study.

How were the Initial Strategy Packages Developed?

The Study Team combined various concepts to develop 15 Initial Strategy Packages based on initial engineering and environmental analysis, MARC's Congestion Management System (CMS) toolbox, as well as comments and feedback from local agencies, stakeholders, and the public. The first seven strategy packages evolved from the previously completed I-70 Major Investment Study (MIS). Eight other packages were focused goal oriented strategy packages meant to address specific needs or issues along I-70.

What were the Initial Strategy Packages Studied?

The following section is a brief summary of the 15 Initial Strategy Packages.

Initial Strategy Package 1: No-Build

The No-Build Package originated from the I-70 MIS and includes maintenance activities as needed and projects already committed to in MoDOT's five-year construction program, the Statewide Transportation Improvement Program (STIP). This package includes the following activities:

- Repaying I-70 through regular maintenance,
- Upgrading the downtown loop's northeast corner/Paseo Boulevard per the kcICON project,
- Upgrading the I-70 interchanges and bridges as identified in the STIP. Over time, maintenance throughout the Study Area would occur as needed.
- Planned upgrades to the I-435/I-70 Interchange which is an Amendment 3 and an Economic Recovery Project,
- Modifying the Manchester Trafficway Interchange,

- Transportation System Management and Transportation Demand Management activities,
- Maintaining the existing bus service provided by the Kansas City Area Transportation Authority.

Initial Strategy Package 2: Improve Key Bottlenecks

Package 2 originated from the I-70 MIS and included everything listed in Package 1 and activities such as:

- Rebuilding and/or rehabilitating I-70 to its existing configuration with a design life of 30 to 50 years, includes the downtown loop to I-470. This includes pavement, roadbed, and structure improvements.
- Improving lane balance in the downtown loop and at the I-435 Interchange.
- Improving interchanges to address ramp lengths, merge areas, and weave sections issues.
- Improving access to I-70 and the downtown loop by adding interchanges, modifying and/or consolidating interchanges with collector distributor roads, or eliminating interchanges.
- Improving the I-70 curves at Benton Boulevard and Jackson Avenue.
- Upgrading the Truman Road Interchange.
- Upgrading the I-435 Interchange to an ultimate interchange design such as the concept identified in the <u>Access Justification Report I-70 and I-435 Interchange</u> <u>Area</u>.
- Integrating Operation Green Light on parallel routes
- Coordinating with Smart Moves Regional Transit Vision
- Improving incident management response times to clear incidents and stalled vehicles to limit traffic backups.
- Investigating locations to implement additional Park and Ride lots as necessary.

Routine pavement and bridge maintenance will continually occur.

What is a bottleneck?

A bottleneck is a section of a road where movement of traffic is limited by the road design. This is often a section of road with a fewer number of lanes, a sharp curve, or access points where traffic is entering or exiting the road. A bottleneck is the most vulnerable point for congestion in a road network and is also referred to as a chokepoint.

What does lane balance mean?

A lane balance issue occurs when the number of through lanes on the highway changes through an interchange, usually as a result of a lane drop. An example of this is I-70 westbound at I-435.

What are collector distributor roads?

Collector distributor roads are lane(s) used to separate mainline traffic and traffic intending to enter/exit at cross streets.

<u>Initial Strategy Package 3: Improve Key Bottlenecks plus HOV</u> Lanes

Package 3 included everything from Package 2 in addition to adding high occupancy vehicle (HOV) lanes (toll optional) from the downtown loop to I-470. Package 3 originates from the I-70 MIS.



Congestion at Jackson Curve

HOV lanes are exclusive lanes for vehicles with two or more occupants. They are physically separated by a barrier, striping, or signing from the adjacent regular lanes that are used by passenger vehicles, buses and freight trucks. The toll option for this package included high occupancy toll (HOT) lanes, which are lanes for vehicles with high passenger occupancy, but may also be used by single occupancy vehicles for a toll.

Adding two HOV lanes was proposed between the downtown loop and I-470 for this strategy. They could be reversible with the flow of peak congested traffic. HOV lanes can move more people during congested periods with fewer vehicles because of the higher number of occupants.

Initial Strategy Package 4: Improve Key Bottlenecks, HOV Lanes, Unique Design Features (Tunnel)

What is a Community Bridge?

A Community Bridge is a concept that will connect neighborhoods across I-70 with the use of pedestrian, bicycle, or green space bridges.

This package includes everything from Package 3 in addition to incorporating a new alignment of I-70 and unique features. Unique features could include rebuilding I-70 on a new alignment in a tunnel from the downtown loop north leg to the upgraded 22nd/23rd Street Interchange at the Benton curve (express lanes in a tunnel); the construction of wider bridges in at least three locations to implement the Community Bridge concept; supporting the implementation of commuter rail on one or both of the two existing rail corridors that operate along the I-70 corridor; and integrating the operation of bus transit on U.S. 40 and other parallel roadways. Package 4 originated from the I-70 MIS.



Green space community bridge over I-696 in Detroit, Michigan

Initial Strategy Package 5: Add General Lanes

Package 5 originated from the I-70 MIS and was focused on improvements to the automobile/truck travel modes by adding general-purpose lanes. This package included everything from Package 1 in addition to widening I-70 to eight lanes from the downtown loop to I-470. Package 5 included activities such as:

- Rebuild and/or rehabilitate I-70 and the entire downtown loop with a design life of 30 to 50 years
- Rehabilitate and/or rebuild I-70 with four lanes in each direction from the downtown loop to I-470
- Improving lane balance in the downtown loop and at the I-435 Interchange.
- Improving interchanges to address ramp lengths, merge areas, and weave sections issues
- Improving access to I-70 and the downtown loop by adding interchanges, modifying and/or consolidating interchanges with collector distributor roads, or eliminating interchanges.
- Improving the I-70 curves at Benton Boulevard and Jackson Avenue.
- Upgrading the Truman Road Interchange.
- Upgrading the I-435 Interchange to an ultimate interchange design such as the concept identified in the

Access Justification Report I-70 & I-435 Interchange Area.

- Add collector distributor roads on I-70 and I-470 through the interchange
- Integrating Operation Green Light on parallel routes
- Coordinating with the Smart Moves Regional Transit Vision
- Improving incident management response times to clear incidents and stalled vehicles to limit traffic backups.
- Investigating locations for implementing additional Park and Ride lots as necessary.
- Adding southbound to westbound and eastbound to northbound directional ramps in the southwest corner of the loop.
- Adding the northbound to eastbound and westbound to southbound directional ramps at I-70 and Bruce R.
 Watkins (U.S. 71) Interchange in the southeast corner of the downtown loop.

What is the Smart Moves Regional Transit Vision?

Smart Moves is the region's long-range transit vision as developed and updated by the Mid-America Regional Council (MARC). The vision highlights corridors throughout the region and suggests service modes that could efficiently serve the populations along those corridors.

<u>Initial Strategy Package 6: Capacity Increases (HOV Lanes) plus</u> <u>Transit Improvements</u>

Package 6 originated from the I-70 MIS. This package was focused on increasing the number of persons served by the highway facility. This package included everything from Package 5 in addition to applying HOV lanes (toll optional) to the new lanes. Package 6 also included activities such as adding I-70 Community Bridges, coordinating with the Smart Moves Regional Transit Vision, adding bus rapid transit (BRT) on parallel arterial routes, supporting transit centers, and supporting commuter rail.

<u>Initial Strategy Package 7: Transportation Improvement Corridor</u>

Package 7, the recommended strategy of the I-70 MIS, consisted of a combination of certain parts of Packages 1 through 6.

The MIS recommended reconstructing I-70 to six lanes with provisions for a 48-foot future transportation improvement corridor from the downtown loop to U.S. 40 east Interchange. The transportation improvement corridor could potentially be

used for HOV lanes, HOT lanes, reversible lanes, bus only lanes, or truck-only lanes. Between I-435 and I-470, the MIS recommended rebuilding I-70 as eight lanes.

Package 7 also included activities such as:

- Rebuilding and/or rehabilitating I-70 including a transportation improvement corridor with a design life of 30 to 50 years, includes the downtown loop to I-470. This includes pavement, roadbed, and structure improvements.
- Improving lane balance in the downtown loop and at the I-435 Interchange.
- Improving interchanges to address ramp lengths, merge areas, and weave sections issues
- Improving access to I-70 and the downtown loop by adding interchanges, modifying and/or consolidating interchanges with collector distributor roads, or eliminating interchanges.
- Improving the I-70 curves at Benton Boulevard and Jackson Avenue.
- Upgrading the Truman Road Interchange.
- Upgrading the I-435 Interchange to an ultimate interchange design such as the concept identified in the <u>Access Justification Report I-70 and I-435 Interchange</u> Area.
- Integrating Operation Green Light on parallel routes.
- Coordinating with Smart Moves Regional Transit Vision
- Improving incident management response times to clear incidents and stalled vehicles to limit traffic backups.
- Investigating locations for implementing additional Park and Ride lots as necessary.

Initial Strategy Package 8: TSM/TDM plus BRT Solutions

Package 8 focused on a combination of improvement concepts specifically aimed at reducing vehicle emissions and automobile use in the I-70 corridor. This package included converting an existing lane on I-70 to BRT and HOV, emphasizing bicycle and pedestrian improvements, community bridges, and encouraging Transportation System



Electronic Message Board

What is ramp metering?

Traffic signals on freeway ramps to manage the flow of traffic entering a freeway.

What are traveler information systems?

Traveler information systems provide traffic information to travelers on the web, on wireless devices, or on message boards. Management and Transportation Demand Management activities.

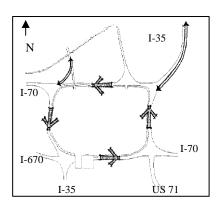
Transportation System Management programs identified in the MARC's CMS toolbox include traffic signal coordination, enhanced freeway incident detection and management, ramp metering, advance traveler information systems, and highway information systems. Two elements, enhanced freeway incident detection and management and advance traveler information systems such as electronic message boards are already in place along I-70. Transportation Demand Management concepts in MARC's toolbox include alternate work hours, telecommuting, ridesharing, and preferential carpool parking. These types of measures could also be implemented as part of the No-Build Strategy or other Build Strategies.

Initial Strategy Package 9: Unique Capacity Designs

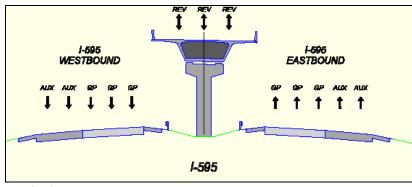
What are specialty lanes?

Specialty lanes are road lanes dedicated for a specific use, such as toll lanes, HOV lanes, bus only lanes, or truck only lanes.

Package 9 focused on unique design strategies to expand I-70 with general purpose lanes while minimizing new right of way needs. Effectively the package expanded the roadway vertically (up) instead of horizontally (out). This package included elevated/stacked highway lanes and a one-way downtown loop. Stacked lanes may be suited in the urban section of the corridor, especially through the Benton and Jackson curves.



One-Way Downtown Loop Concept



Stacked Lane Concept

The one-way loop option is a one directional loop around downtown using the existing downtown loop. Downtown access and an exact plan for the conversion from two-way traffic flow to one-way traffic flow would require further development. Under the proposal, the entire downtown loop traffic flow would travel in a counter clockwise direction with the north side of the downtown loop traveling west; west side traffic would travel south; south side traffic would travel east; and east side traffic would travel north.

Initial Strategy Package 10: Rail Transit

Package 10 focused on rail transit strategies within the I-70 corridor right of way. This package included an exclusive rail corridor which may be commuter rail or light rail and enhanced park and ride facilities. Rail could either run the length of the corridor from I-470 to the downtown loop or connect with existing rail lines that run near to or cross I-70 and only run along I-70 for part of the corridor. There would be no expansion of general purpose lanes or major bottleneck fixes as part of this strategy although the speed reduced curves at Jackson Avenue and Benton Boulevard would have needed improvement to allow for rail lines.

Light rail transit could operate in the I-70 right of way in specialty lanes on one side of the roadway or in the median. Light rail would have a limited number of stops and provide travel time savings during peak congestion periods. Light rail would need to be coordinated with other regional light rail initiatives.

Commuter rail transit generally uses existing rail lines to provide morning and afternoon service during the heaviest congestion periods and carries both freight and passenger cars on a daily basis. Because of the shared nature of the rail line between freight and commuter service, commuter rail would only run during the morning and afternoon peak commuter periods. There is an opportunity to use a combination of existing and new rail lines. A new commuter rail connection between the existing Rock Island line at Blue River and the Kansas City Terminal line near 18th Street is a possible combination. This alignment could use Union Station as a terminus point. However, the growing demand for freight rail (projected to increase 40 to 60 percent nationally in the next 20 years) could lead to rail congestion locally without investment This may limit the opportunity for in additional tracks. commuter rail to share the freight rail tracks.



Light Rail Concept



Commuter Rail Concept

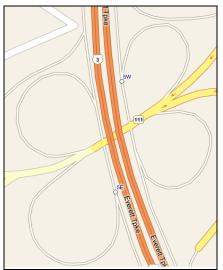
Initial Strategy Package 11: Freight Movement

What are truck-only lanes?

Truck-only lanes area dedicated lanes restricted for truck use only.

Collector Distributor System Concept

A collector/distributor road, often abbreviated as C/D road, is a one-way road next to a freeway that is used for some or all of the ramps movements that would otherwise merge into or split from the main lanes of the freeway. Below is an example of a cloverleaf interchange that includes C/D roads to connect the ramps.



Collector Distributor System – Everett Parkway and Highway 111 in Nashua, NH

Package 11 focused on freight movement strategies to improve I-70 as a freight corridor. This package included exclusive truck-only lanes on the inside of the general purpose lanes. The existing freeway would need to be rebuilt and widened to accommodate truck-only lanes. Truck-only lanes would be best suited for the suburban section of the I-70 corridor (I-470 to I-435). They could provide access to I-435 without directing additional through trucks into the core of the city. The separation of truck-only lanes from the general purpose lanes could be accomplished with a physical barrier or a buffer area delineated with pavement markings. The additional width required for a truck-only lane would have extensive negative impacts through the downtown loop. A designated truck route and signage could be used to enhance truck flows through the downtown loop.

Initial Strategy Package 12: Collector Distributor Roads

Package 12 focused on collector distributor roads to improve the I-70 corridor. This package included constructing a parallel collector distributor roadway system which would provide local access to cross streets and reduce the number of access points to/from I-70. The full collector distributor system would require two additional lanes in each direction at most locations.

With a collector distributor system, there would be designated freeway lanes and a collector distributor road system. The freeway lanes would carry the through traffic and only have access to the collector distributor road system every two to four miles. The collector distributor road system would provide access to the existing cross street interchanges. The cross street access with the collector distributor road may be in the form of an intersection or an interchange.

<u>Initial Strategy Package 13: Privatization</u>

Package 13 focused on involving the private sector in developing and funding strategies to improve the I-70 corridor. This package included selling or leasing I-70 to a

third party that would convert I-70 into a toll road and use the collected toll revenue to build, operate, and maintain the roadway. In order for this strategy to be feasible, the private sector needs a revenue stream from the project. This could include toll lanes or some form of a fee paid by the public sector based on usage of the facility. Tolls could be set at a fixed rate, on fixed mileage schedule, or determined by time of day and volume of traffic. Either the public or private sector could implement some form of congestion pricing.

Initial Strategy Package 14: Bus Transit Focus

Package 14 focused on bus transit strategies in the I-70 corridor right of way. This package included an exclusive corridor for BRT service, enhancing park and ride facilities, coordinating with the Smart Moves Regional Transit Vision, and enhancing transit applications such as advance traveler information systems.

Bus rapid transit would operate in a specialty corridor with limited stops. The BRT corridor would remove the buses from the congestion and slow downs in the general purpose lanes and have a travel time advantage over personal automobiles. In lieu of a dedicated corridor, some metropolitan areas are allowing buses to drive on the shoulder during congested periods of the day. This accomplishes travel time benefits for bus transit which may attract more riders. The Smart Moves Regional Transit Vision calls for a fixed route bus service along I-70; however, does not identify if that is in an exclusive BRT lane or in the general traffic flow.

Initial Strategy Package 15: Reduce Capacity

Package 15 focused on reducing the number of general purpose lanes and converting the interchanges to intersections. Effectively, I-70 would be reduced to a parkway and commuters would need to spread out to other roads or other modes of transportation. I-70 would require redesignation along other interstate facilities to maintain a connection with I-70 in Kansas. This package included bus service improvements, Transportation System Management, and Transportation Demand Management elements. This

package was considered from I-435 to the downtown loop and potentially for the north side of the downtown loop.

2.2 First Tier Strategies Development

This section discusses how well the 15 Initial Strategy Packages address the overall reasons for improvements within the Study Area. The Study Team also considered engineering issues and impacts to the environment in the evaluation. The Study Team screened the 15 Initial Strategy Packages down to four First Tier Strategies.

How were the Initial Strategy Packages Screened?

The 15 Initial Strategy Packages were evaluated against the purpose and need for improving I-70:

- Improve Safety
- Reduce Congestion
- Restore and Maintain Existing Infrastructure
- Improve Accessibility
- Improve Goods Movement

More detailed information on the purpose and need for improving I-70 is in **Chapter 1**. The Study Team also considered engineering issues and impacts to the human environment, the natural environment, and the cultural resources within the Study Area. Initial Strategy Packages were not carried forward if they did not meet the purpose and need, with the exception of No-Build Strategy. In addition, a package was not carried forward if it contained the same basic concepts as another package carried forward, was combined with other packages that were carried forward, or had engineering or costs estimates that were magnitudes higher than other packages. The complete Screening Memorandum is in **Appendix C**.

What are the four First Tier Strategy Packages?

The screening process resulted in four strategy packages being carried forward for further analysis. The packages carried forward included:

What is a screening process?

An evaluation that identifies which strategies best achieve the goals set forth by the project.

- <u>Strategy Package 1 No-Build:</u> This is a requirement of the National Environmental Policy Act process.
- <u>Strategy Package 2 Improve Key Bottlenecks:</u> This package was moved forward with the addition of bus transit on the shoulder, collector distributor road systems at key locations, and potential community bridges.
- <u>Strategy Package 5 Add General Lanes:</u> This package was moved forward with the addition of bus transit on the shoulder, collector distributor road systems at key locations, and potential community bridges.
- Strategy Package 7 Improve Key Bottlenecks plus
 <u>Transportation Improvement Corridor</u>: This package
 was moved forward with the addition of bus transit on
 the shoulder, collector distributor road systems at key
 locations, and a wider transportation improvement
 corridor to accommodate four lanes and shoulders.

The following sections describe the strategies in detail. A discussion of the strategies' elements within five different Sub-Areas is also included. The Sub-Areas are:

- <u>Downtown Sub-Area:</u> The downtown loop (the FTEIS Study Area west of Tracy Avenue)
- <u>Urban Sub-Area:</u> The downtown loop to west of I-435 (Tracy Avenue to Topping Avenue)
- <u>I-435 Sub-Area:</u> West of I-435 to east of I-435 (Topping Avenue to east of Blue Ridge Cutoff)
- <u>Suburban Sub-Area:</u> East of I-435 to west of I-470 (East of Blue Ridge Cutoff to east of Lee's Summit Road)
- <u>I-470 Sub-Area:</u> West of I-470 to east of I-470 (East of Lee's Summit Road to the east limits of the Study Area)

Figure 3.0 shows the five Sub-Areas.

Describe the No-Build Strategy

The No-Build strategy includes maintenance activities as needed and projects already committed as part of existing STIP. The No-Build Strategy includes a needed level of effort required to address the major safety and maintenance problems. **Figure 2.1** at the end of this chapter illustrates the

key parts of the No-Build Strategy. The following describes the parts of the No-Build Strategy by location:

<u>Corridor Wide Improvements</u>: The work will include routine maintenance activities to pavement and bridges as needed. Existing bus transit service would be maintained.

<u>Downtown Sub-Area:</u> Downtown loop improvements in the No-Build Strategy include lane balance and access improvements in the northeast corner of the downtown loop as part of the kcICON project.

The South Loop Link Study is a City of Kansas City, Missouri study that is evaluating the possibility of enclosing the south leg of the downtown loop to expand development opportunities in the downtown. The South Loop Link would be considered as a separate project upon completion of its study.

<u>Urban Sub-Area</u>: The No-Build Strategy includes bridge rehabilitations from Van Brunt Boulevard to Paseo Boulevard per MoDOT STIP.

I-435 Sub-Area: As part of an existing project in the STIP, MoDOT has committed to modifying the freeway access along I-70 and I-435 to relieve congestion in the I-435 & I-70 interchange. The improvements include adding lanes to I-70; modifying ramps on I-70 EB into a collector-distributor system and extending ramps at several locations for additional weave, merge and diverge area; adding partial access at I-435 and US 40 and modifying access at I-70 and Manchester Trafficway; modifying the ramp terminals at US 40/31st Street; and replacing the Blue Ridge Cutoff Bridge. These improvements reduce congestion, improve safety and address two bridge maintenance needs in the interchange area.

<u>Suburban Sub-Area</u>: All bridges, except Noland Road, will be rehabilitated from I-435 to U.S. 40 east per MoDOT STIP.

<u>I-470 Sub-Area</u>: There are no improvements planned in the No-Build Strategy.

Key Elements of the No-Build Strategy

- I-70 Pavement Maintenance
- Bridge Rehabilitations as needed

kclCON Project



 Amendment 3 and Economic Recovery Project including the I-435/I-70 Interchange.



Describe the Improve Key Bottlenecks Strategy

The Improve Key Bottlenecks Strategy as shown in **Figure 2.2** and **Figure 2.3** includes the activities from the No-Build Strategy described above. **Figure 2.3** shows the existing right of way, the conceptual alignment, and the slope line. The slope line is the extent to which earth will be disrupted for the construction of a strategy. The slope line may be reduced as preliminary design occurs in the Second Tier studies. The following paragraphs discuss the locations of key improvements as discussed in the previous bullets points for the Improve Key Bottlenecks Strategy.

<u>Corridor Wide Improvements</u>: The Improve Key Bottlenecks Strategy rebuilds and/or rehabilitates I-70 and the downtown loop to its existing configuration with a design life of 30 to 50 vears. This includes pavement, roadbed, and structure This strategy will evaluate interchange improvements. improvements to address ramp lengths, merge areas, and weave sections at all interchanges. Other corridor wide improvements in the Improve Key Bottlenecks Strategy include integrating Operation Green Light on parallel routes, improving incident management response times to clear incidents and stalled vehicles, coordinating with the Smart Moves Regional Transit Vision, improving non-motorized access across I-70 and the downtown loop with Community Bridges, and investigating locations to add Park and Ride lots as necessary.

<u>Downtown Sub-Area:</u> The downtown loop improvements in the Improve Key Bottlenecks Strategy include lane balance and improvements in the northeast corner of the downtown loop as part of the kcICON project. The strategy will also consider interchange additions, consolidations, modifications, and/or eliminations to improve traffic flow and safety.

The Improve Key Bottlenecks would consider the on-going South Loop Link Study to evaluate the possibility of enclosing the south leg of the downtown loop to expand development opportunities in the downtown. The Second Tier studies will coordinate with that planning effort and consider the recommended improvements from that study. In addition, the Wyandotte on-ramp to westbound I-670 was removed

Key Elements of the Improve Key Bottlenecks Strategy

- Rebuild and/or rehabilitate I-70 and the downtown loop with a design life of 30 to 50 years
- Downtown loop lane balance improvements
- Improve interchanges by addressing ramp lengths, merge areas, and weave sections
- Consider interchange additions, consolidations, modifications, or eliminations to improve traffic flow and safety
- Improve the Jackson and Benton curves
- Rebuild the I-70/I-435
 Interchange to provide six lanes on I-70 and six lanes on I-435 through the interchange
- Add CD roads on I-70 and I-470 through the I-70/I-470 Interchange
- Enhance I-70 express bus service, provide for bus transit on shoulder, and explore locations to add park and ride lots as necessary

during the Bartle Hall expansion. There was a commitment to replace this ramp at a future date. The need to replace this connection and where the ramp would be located are issues that will be evaluated in the Second Tier studies.

<u>Urban Sub-Area</u>: I-70 would be rebuilt to provide for bus transit on the shoulder. The Improve Key Bottlenecks Strategy includes the bridge rehabilitation along I-70 from Paseo Boulevard to Van Brunt Boulevard. I-70 curves at Benton Boulevard and Jackson Avenue would be improved within the available right of way to the extent possible. The strategy will consider interchange consolidations, modifications with CD roads, and/or elimination of access at 18th Street to improve traffic flow and safety.

<u>I-435 Sub-Area</u>: I-70 would be rebuilt to provide for bus transit on the shoulder. In addition to the projects currently programmed in the STIP, MoDOT will continue to modify the freeway access along I-70 and I-435 to relieve congestion and improve the condition of the system in the I-435 and I-70 interchange area. Similar to the programmed STIP project, the proposed improvements include adding lanes to I-435; modifying ramps into a collector-distributor system on I-70 and I-435 and extending ramps at several locations for additional weave, merge and diverge area; reconstructing and relocating the fully directional ramps to eliminate left-side exits from the interstate. These proposed improvements reduce congestion, improve safety and address bridge maintenance needs in the interchange area.

To improve the traffic of on I-70, access improvements in the I-435 Sub-Area could include access modifications at Manchester Trafficway.

Suburban Sub-Area: I-70 would be rebuilt through this area to provide for bus transit on the shoulder. All bridges from Blue Ridge Cutoff to U.S. 40 east would be rehabilitated per MoDOT STIP. This strategy will consider interchange consolidations, modifications with CD roads, and/or eliminations through the Sterling Avenue, U.S. 40 east, and the Blue Ridge Boulevard interchanges to improve traffic flow and safety.

<u>I-470 Sub-Area</u>: I-70 would be rebuilt through the I-470 Interchange and would provide for bus transit on the shoulder. The Improve Key Bottlenecks Strategy would address short ramps and merging issues on I-70 and I-470 at the interchange between the two freeways. A collector distributor road system would be added on I-70 through the interchange and on I-470 between U.S. 40 and 39th Street.

<u>Engineering and Footprint Issues</u>: The Improve Key Bottlenecks Strategy key engineering locations are the two major I-70 interchanges at I-435 and I-470, 18th Street Interchange, the series of Sterling Avenue, U.S. 40 east, and Blue Ridge Boulevard interchanges, and the Jackson and Benton curves.

Some additional right of way may be needed throughout the corridor to implement these improvements. Impacts would most likely occur to those parcels adjacent to the existing highway.

The footprint in the Improve Key Bottlenecks Strategy would have a two foot wider shoulder than the existing typical section of I-70 to accommodate bus transit on shoulder operations. The primary impacts would be near the interchanges to improve ramp lengths and weave areas. During the Second Tier studies, the footprints and resulting impacts would be refined to minimize the overall right of way impacts.

Describe the Add General Lanes Strategy

The Add General Lanes Strategy as shown in **Figure 2.4** and **Figure 2.5** builds upon the elements from the Improve Key Bottlenecks Strategy. The Add General Lanes Strategy includes the activities described below.

<u>Corridor Wide Improvements</u>: The Add General Lanes Strategy rebuilds and/or rehabilitates I-70 and the downtown loop with a design life of 30 to 50 years. This includes pavement, roadbed, and structure improvements. This strategy would evaluate interchange improvements to address ramp lengths, merge areas, and weave sections at all interchanges. Other corridor wide improvements in the Add

Key Elements of the Add General Lanes Strategy

- Rehabilitate and/or rebuild I-70 and the downtown loop with a design life of 30 to 50 years
- Rehabilitate and/or rebuild I-70 with four lanes in each direction from the downtown loop to I-470
- Downtown loop lane balance improvements
- Add directional ramps in the southeast and southwest corners of the downtown loop as shown below



- Consider interchange additions, consolidations, modifications, or eliminations to improve traffic flow and safety
- Improve the Jackson and Benton curves
- Rebuild the I-70/I-435
 Interchange to provide eight lanes on I-70 and six lanes on I-435 through the interchange
- Add CD roads on I-70 and I-470 through the interchange
- Enhance I-70 express bus service, provide for bus transit on shoulder, and explore locations to add park and ride lots as necessary

General Lanes Strategy include integrating Operation Green Light on parallel routes, improving incident management response times to clear incidents and stalled vehicles, coordination with Smart Moves Regional Transit Vision, improving non-motorized access across I-70 and the downtown loop with Community Bridges, and investigating locations to add Park and Ride lots as necessary.

<u>Downtown Sub-Area:</u> The downtown loop improvements in the Add General Lanes Strategy include lane balance and improvements in the northeast corner of the downtown loop as part of the kcICON project. The strategy would also consider interchange additions, consolidations, modifications, and/or eliminations to improve traffic flow and safety.

The Add General Lanes Strategy would add the missing westbound to southbound and the northbound to eastbound directional ramps to/from U.S. 71. This strategy would add the missing southbound to westbound and the eastbound to northbound directional ramps between I-35 and I-670 in the southwest corner of the downtown loop.

The Add General Lanes Strategy would also consider the ongoing South Loop Link study to evaluate the possibility of enclosing the south leg of the downtown loop to expand development opportunities in the downtown. The Second Tier Studies will coordinate with that planning effort and consider the recommended improvements from that study. In addition, the Wyandotte on-ramp to westbound I-670 was removed during the Bartle Hall expansion. There was a commitment to replace this ramp at a future date. The need to replace this connection and where the ramp would be located are issues that will be evaluated in the Second Tier studies.

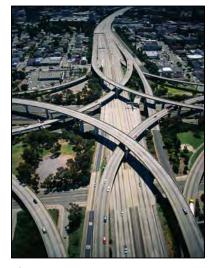
<u>Urban Sub-Area</u>: I-70 would be rebuilt to eight lanes and provide for bus transit on the shoulder. The Add General Lanes Strategy includes the rebuild and/or rehabilitation of all bridges to accommodate eight lanes on I-70. I-70 curves at Benton Boulevard and Jackson Avenue would be improved within the available right of way to the extent possible. The strategy will consider interchange consolidations, modifications with CD roads, and/or eliminations at 18th Street to improve traffic flow and safety.

<u>I-435 Sub-Area</u>: I-70 would be rebuilt to eight lanes and provide for bus transit on the shoulder. In addition to the projects currently programmed in the STIP, MoDOT will continue to modify the freeway access along I-70 and I-435 to relieve congestion and improve the condition of the system in the I-435 and I-70 interchange area. Similar to the programmed STIP project, the proposed improvements include adding lanes to I-435; modifying ramps into a collector-distributor system on I-70 and I-435 and extending ramps at several locations for additional weave, merge and diverge area; reconstructing and relocating the fully directional ramps to eliminate left-side exits from the interstate. These proposed improvements reduce congestion, improve safety and address bridge maintenance needs in the interchange area.

To improve the traffic of on I-70, access improvements in the I-435 Sub-Area could include access modifications at Manchester Trafficway.

<u>Suburban Sub-Area</u>: I-70 would be rebuilt with eight lanes and provide for bus transit on the shoulder. All bridges will be rebuilt and/or rehabilitated to accommodate eight lanes on I-70. The Add General Lanes Strategy will consider interchange consolidations, modifications with CD roads, and/or eliminations through the Sterling Avenue, U.S. 40 east, and the Blue Ridge Boulevard interchanges to improve traffic flow and safety.

<u>I-470 Sub-Area</u>: The Add General Lanes Strategy would address short ramps and merging issues on I-70 and I-470 at the interchange between the two freeways. I-70 would be rebuilt with eight lanes through the I-470 Interchange and would provide for bus transit on the shoulder. Interchange improvements would potentially include flyover or braided ramps to eliminate the some of the interchange weaving areas. I-470 may also require interchange improvements at U.S. 40 and 39th Street to maintain access for the new flyover ramps. I-470 mainline improvements would be required as the new ramps merge with I-470 traffic. I-70 would also require some ramp modifications.



Flyover Ramps

What is a Flyover Ramp?

A flyover ramp is a directional interchange ramp that passes over the through travel lanes at an interchange.

Engineering and Footprint Issues:

The Add General Lanes Strategy key engineering locations are the two major I-70 interchanges at I-435 and I-470, 18th Street Interchange, the series of Sterling Avenue, U.S. 40 east, and Blue Ridge Boulevard interchanges, and the Jackson and Benton curves.

Some additional right of way may be needed throughout the corridor. Impacts would most likely occur to those parcels adjacent to the existing highway.

The Add General Lanes Strategy is planning flyover ramps to eliminate weaving areas within the I-470 interchange area. In order to maintain access between I-70, I-470, U.S. 40, and 39th Street, the flyover ramps can be developed as braided ramps with the existing ramps or the circular ramps can be left in place. Some additional right of way would be needed throughout the corridor for this improvement. Impacts would most likely occur to those parcels adjacent to the existing highway.

The Add General Lanes Strategy footprint would be approximately 38 feet wider than the existing typical section of I-70 to accommodate the additional general use lanes and the bus on shoulder operations. During the Second Tier studies, the footprint and resulting impacts would be refined to minimize the overall right of way impacts.

Transportation Improvement Corridor Strategy

The Transportation Improvement Corridor Strategy as shown in **Figure 2.6** and **Figure 2.7** builds upon the elements of the Improve Key Bottlenecks Strategy plus it adds a transportation improvement corridor between the downtown loop and east of Lee's Summit Road. The transportation improvement corridor could be located between the eastbound and westbound lanes or on one side of the I-70 corridor. As currently proposed, the transportation improvement corridor would be barrier separated from the regular traffic lanes. The transportation improvement corridor could be used for congestion managed lanes, reversible lanes, HOV lanes, or bus lanes.

The Transportation Improvement Corridor Strategy includes the activities described below.

Corridor Wide Improvements: The Transportation Improvement Corridor Strategy rebuilds and/or rehabilitates I-70 and the downtown loop with a design life of 30 to 50 This includes pavement, roadbed, and structure improvements. This strategy would evaluate interchange improvements to address ramp lengths, merge areas, and weave sections at all interchanges. Other corridor wide improvements in the Transportation Improvement Corridor Strategy includes integrating Operation Green Light on parallel routes, improving incident management response times to clear incidents and stalled vehicles, coordination with Smart Moves Regional Transit Vision, improving nonmotorized access across I-70 and the downtown loop with Community Bridges, and investigating locations to add Park and Ride lots as necessary.

<u>Downtown Sub-Area:</u> The downtown loop improvements in the Transportation Improvement Corridor Strategy include lane balance and improvements in the northeast corner of the downtown loop as part of the kcICON project. The strategy will also consider interchange additions, consolidations, modifications, and/or eliminations to improve traffic flow and safety.

The Transportation Improvement Corridor Strategy would also consider the on-going South Loop Link study to evaluate the possibility of enclosing the south leg of the downtown loop to expand development opportunities in the downtown. The Second Tier Studies will coordinate with that planning effort and consider the recommended improvements from that study. In addition, the Wyandotte on-ramp to westbound I-670 was removed during the Bartle Hall expansion. There was a commitment to replace this ramp at a future date. The need to replace this connection or not and where the ramp would be located are issues that will be evaluated in the Second Tier studies.

<u>Urban Sub-Area</u>: I-70 would be rebuilt with a transportation improvement corridor. The Transportation Improvement

Key Elements of the Transportation Improvement Corridor Strategy

- Rehabilitate and/or rebuild the entire downtown loop and I-70 to east of I-470
- Add dedicated lanes that could be used for trucks, HOV, or toll facilities located parallel to the general purpose lanes from the downtown loop to east of Lee's Summit Road
- Downtown loop lane balance
- Consider interchange additions, consolidations, modifications, or eliminations to improve traffic flow and safety
- Improve the Jackson and Benton curves
- Rebuild the I-70/I-435
 Interchange to provide a transportation improvement corridor on I-70 and six lanes on I-435 through the interchange
- Add CD roads on I-70 and I-470 through the interchange
- Enhance I-70 express bus service, provide for bus transit on shoulder, and explore locations to add park and ride lots as necessary

Corridor Strategy includes the rebuild and/or rehabilitation of all bridges to accommodate a transportation improvement corridor on I-70. I-70 curves at Benton Boulevard and Jackson Avenue would be improved within the available right of way to the extent possible. The strategy will consider interchange consolidations, modifications with collector distributor roads, and/or elimination of access at 18th Street to improve traffic flow and safety.

<u>I-435 Sub-Area</u>: I-70 would be rebuilt with a transportation improvement corridor through this Sub-Area. In addition to the projects currently programmed in the STIP, MoDOT will continue to modify the freeway access along I-70 and I-435 to relieve congestion and improve the condition of the system in the I-435 and I-70 interchange area. Similar to programmed STIP project, the proposed improvements include adding lanes to I-435; modifying ramps into a collector-distributor system on I-70 and I-435 and extending ramps at several locations for additional weave, merge and diverge area; reconstructing and relocating the fully directional ramps to eliminate left-side exits from the interstate. These proposed improvements reduce congestion, improve safety and address bridge maintenance needs in the interchange area.

To improve the traffic of on I-70, access improvements in the I-435 Sub-Area could include access modifications at Manchester Trafficway.

<u>Suburban Sub-Area</u>: I-70 would be rebuilt with a transportation improvement corridor. All bridges would be rebuilt and/or rehabilitated to accommodate a transportation improvement corridor on I-70. The Transportation Improvement Corridor Strategy would consider interchange consolidations, modifications with CD roads, and/or eliminations through the Sterling Avenue, U.S. 40 east, and the Blue Ridge Boulevard interchanges to improve traffic flow and safety.

<u>I-470 Sub-Area</u>: The Transportation Improvement Corridor Strategy would rebuild I-70 with eight lanes as I-70 transitions from the transportation improvement corridor east of Lee's Summit Road to general use lanes. This strategy would

address short ramps and merging issues on I-70 and I-470 at the interchange between the two freeways. Interchange improvements would potentially include flyover or braided ramps to eliminate the some of the interchange weaving areas. I-470 may also require interchange improvements at U.S. 40 and 39th Street to maintain access for the new flyover ramps. I-470 mainline improvements would be required as the new ramps merge with I-470 traffic. I-70 would also require some ramp modifications.

<u>Engineering and Footprint Issues</u>: The Transportation Improvement Corridor Strategy key engineering locations are the two major I-70 interchanges at I-435 and I-470, 18th Street Interchange, the series of Sterling Avenue, U.S. 40 east, and Blue Ridge Boulevard interchanges, and the Jackson and Benton curves.

Some additional right of way may be needed throughout the corridor. Impacts would most likely occur to those parcels adjacent to the existing highway.

The transportation improvement corridor would transition into general use lanes between Benton Boulevard and Paseo Boulevard on the west end of the corridor and between Lee's Summit Road and I-470 on the east end of the corridor. The transportation improvement corridor would need to provide adequate space ahead of the downtown loop and I-470 for vehicles in the transportation improvement corridor to maneuver into the proper lanes at these two interchanges.

The Transportation Improvement Corridor Strategy pavement would be approximately 88 feet wider than the existing typical section of I-70 to accommodate the transportation improvement corridor. During the Second Tier studies, the footprints and resulting impacts will be refined to minimize the overall right of way impacts.

Summary of First Tier Strategies

The strategies each build upon the other strategies by providing additional improvements. The Improve Key Bottlenecks Strategy includes the No-Build improvements and adds a series of additional bottleneck improvements.

Likewise, the Add General Lanes Strategy includes the Improve Key Bottlenecks Strategy improvements and adds additional improvements. Similarly, the Transportation Improvement Corridor Strategy adds improvements to the Improve Key Bottlenecks Strategy. This is displayed in **Table 2.1 Strategy Summary Table**.

Table 2.1 Strategy Summary Table

	0)	diffilliary rabic		
				Transportation
		Improve Key	Add General	Improvement
	No-Build	Bottlenecks	Lanes	Corridor
kcICON Project – Interchange	J	√	√	J
improvements to accommodate six lanes on				
I-29/I-35 north of the downtown loop				
I-435/I-70 Interchange Amendment 3 and	J	√	J	J
Economic Recovery Project Improvements				
Routine Maintenance Activities	√	√	J	J
Downtown Loop - Potential Access		J	J	J
Consolidations				
Downtown Loop - Ensure Consistent		√	√	J
Number of Lanes on Freeways				
Improve Benton and Jackson Curves		√	J	J
I-435/I-70 Compete Interchange Upgrade		√	√	J
Express Commuter Bus/Bus on Shoulder		√	J	J
Downtown Loop - Improve Interchanges to			√	
Add Missing Ramps				
Add One Lane in Each Direction			√ .	
Add Transportation Improvement Corridor				J

2.3 First Tier Strategies Traffic Modeling

What is a base year?

A base year is a recent year that serves as the starting point for a traffic forecast. It is typically a year in which a lot of traffic counts are available so that the model results can be compared to actual traffic data to ensure accuracy.

This section discusses how traffic models were developed and used by MoDOT in making their decision.

How were the First Tier Strategies Effects on Traffic Analyzed?

The Study Team used 2005 traffic counts as the base year and 2030 as the forecasted future year for assessing traffic levels on I-70. MoDOT provided historical Average Annual Daily Traffic (AADT) counts. The First Tier Strategies were modeled using a modified 2005 MARC regional travel demand model and the Highway Capacity Software (HCS). The modified MARC regional travel demand model was used

to identify the daily volumes on I-70 while HCS was used to evaluate the peak hour congestion through the corridor for each strategy.

The modified 2005 regional model output was compared to actual 2005 traffic counts along I-70 to determine the reasonableness of the 2005 base year prior to modeling for 2030 conditions. The Study Team made some localized edits to the regional model to improve where and how traffic would flow through the model's road network for a better representation of the actual traffic patterns. There was also a need to manually adjust the model output at a few locations to achieve a better replication of the actual traffic counts that were available. This process provided the Study Team with added confidence that the best available 2030 forecast volumes would be achieved.

How were the Effects of the First Tier Strategies on Traffic Levels Modeled?

The First Tier Strategy improvements were added to the regional model one strategy at a time. The Study Team ran the regional model for each strategy which resulted in 2030 traffic volumes for each of the First Tier Strategies including the No-Build Strategy.

The Study Team decided to conduct a detailed traffic analysis of the downtown loop as part of the Second Tier studies due to its complexity.

The traffic volumes from the modified 2005 MARC regional model output were compared to the 2030 regional model output volumes for each First Tier Strategy to determine the daily traffic increase. The amount of traffic increase for each strategy was then added to the actual 2005 traffic counts to arrive at the 2030 traffic estimates for the First Tier Strategies.

On average, the traffic model forecast that traffic volumes along I-70 would increase between nine percent and 23 percent from 2005 and 2030. This is a relatively moderate level of traffic growth compared to the level of growth experienced in the past 20 years. For instance, between 1995 and 2005,

What is Average Annual Daily Traffic (AADT)?

AADT is the average number of vehicles that use a road segment on an average day. It is an estimate of the number of vehicles that use a section of road during an entire year divided by 365.

What is the MARC Travel Demand Model?

The MARC Travel Demand Model is a regional computer model that attempts to predict future traffic based on demographics, land uses, population, and traffic volumes. Future traffic demands are also based on regionally accepted land use and employment projections.

What is a Peak Hour?

The peak hour is the hour of the day when traffic volumes on a roadway are at their highest. The peak hour typically occurs during the morning or afternoon rush hour, when people are traveling to and from work.

traffic volumes increased from nine percent near 23rd Street to over 70 percent between U.S. 40 east and Noland Road.

The daily traffic level estimates were converted to morning and afternoon peak hour volumes based on actual traffic count and peak hour volume data. The morning and afternoon peak hour volumes for each strategy were analyzed in HCS to identify congestion concerns on I-70 road sections.

The congestion results are discussed in **Section 2.4** for each of the First Tier Strategies.

2.4 Evaluation Process for First Tier Strategies

This section discusses how MoDOT screened the four First Tier Strategies to decide on an Identified Preferred Strategy. Each strategy is evaluated in terms of purpose and need, traffic, and engineering issues. The strategy evaluation matrix, **Table 2.2** is located at the end of this chapter. The environmental analysis of the strategies is contained in **Chapter 3**.

How well will the First Tier Strategies Improve Traffic Conditions and Goods Movement?

The Study Team used the modified MARC travel demand model as a tool to determine the expected change in traffic volumes on I-70. The Study Team also used HCS analysis to determine how well each strategy would reduce travel congestion.

Congestion is often expressed in terms of level of service (LOS) to describe how well roadways flow under various traffic flow conditions. The concept of LOS is defined as a qualitative measure describing operational conditions within a traffic stream and the perception by motorists and/or passengers. A LOS definition provides an index of the quality of traffic flow in terms of such factors as speed, travel time, freedom to maneuver, traffic interruptions, comfort, convenience, and safety. Six levels of service are defined for each type of facility. They are given letter designations from A to F, with LOS A representing the best operating conditions and LOS F an undesirable, high level of congestion. The

Study Team has set a LOS goal for the peak hour analysis of LOS E in 2030 for the improvement strategies. A graphical example of LOS is displayed in **Figure 2.8.**

The general level of service descriptions are described as:

- LOS A represents free flow.
- LOS B is in the range of stable traffic flow at free flow speeds, but the presence of other users in the traffic stream begins to be noticeable.
- LOS C is in the range of stable traffic flow at free flow speeds, but marks the beginning of the range of flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream.
- LOS D represents high-density, but stable traffic flow with slight declines in the travel speed.
- LOS E represents operating conditions at or near the capacity level with noticeable declines in travel speed.
- LOS F is used to define forced or breakdown flow.

Since the LOS of a roadway is a function of the traffic flows driving on it, a road may operate at a wide range of LOS, depending on the time of day, day of the week, or season of the year.

The HCS analysis results are shown in **Table 2.3** which display the miles of undesirable congestion at LOS F.

Figure 2.8 Level of Service for Highways

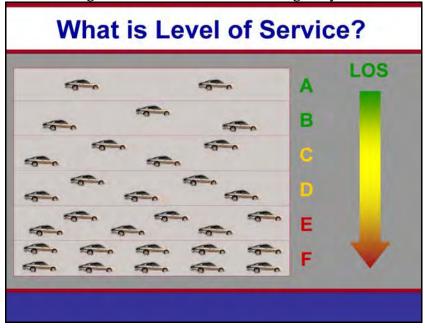


Table 2.3 2030 Peak Hour Miles of LOS F

Strategy		of I-435 niles)	East of I-435 (8 miles)		
	AM	PM	AM	PM	
No-Build	2.3	0.0	4.2	6.0	
Improve Bottlenecks	0.5	0.0	1.7	4.0	
Add General Capacity	0.0	0.0	0.0	0.0	
Improvement Corridor	0.0	0.0	0.0	0.0	

No-Build Strategy: The No-Build Strategy does not improve the traffic congestion conditions or goods movement. The traffic conditions and goods movement continue to worsen in this strategy. Undesirable congestion is expected during the 2030 morning westbound commute at I-470, between Lee's Summit Road and Blue Ridge Cutoff, between Sterling Avenue and I-435, and from I-435 to Benton Boulevard. The morning commute is expected to have 6.5 miles of undesirable congestion. The 2030 eastbound evening commute is expected to have undesirable levels of congestion from I-435 to U.S. 40 east and from Blue Ridge Boulevard to I-470. The evening commute is expected to have 6.0 miles of undesirable congestion east of I-435. The high congestion for the No-Build Strategy would affect both the movement of passenger vehicles and trucks carrying goods to, within, and through the

Kansas City metropolitan area. The HCS results for the No-Build Strategy are shown graphically in **Appendix D**.

Improve Key Bottlenecks Strategy: For the Improve Key Bottlenecks Strategy there are two locations with undesirable congestion between the downtown loop and I-435 and undesirable congestion is still expected between I-435 and I-470. The Study Team believes that additional design considerations would be able to provide relief to the undesirable congestion at the two locations west of I-435 that indicate undesirable congestion. The two locations are the westbound weave area between U.S. 40 and Van Brunt Boulevard and the westbound weave area between 23rd Street and 18th Street. The morning commute is expected to have one half mile of undesirable congestion in 2030 west of I-435. East of I-435, there is 5.7 miles of undesirable congestion in 2030. These will be looked at in greater detail during the Second Tier studies.

The 2030 westbound morning commute would experience some congestion at the I-470 Interchange, from Noland Road and Lee's Summit Road, Sterling Avenue and Blue Ridge Cutoff, U.S. 40 west and Van Brunt Boulevard, and 23rd Street and 18th Street. The 2030 eastbound evening commute would also be improved with expected congestion from Sterling Avenue to Chrysler Avenue and Noland Road to I-470. The evening commute is expected to have four miles of undesirable congestion east I-435. The HCS results for the Improve Key Bottlenecks Strategy are shown graphically in **Appendix D**.

Reduced congestion would benefit goods movement along I-70. Some companies have limited truck deliveries during the commuter morning and afternoon commutes to avoid congested roadways like I-70, minimize lost time for drivers, and achieve more reliable delivery times. However, the overall improvements for the Improve Key Bottlenecks Strategy, particularly the improvements at the Benton and Jackson Curves, would assist with the movement of freight during all times of the day.

Add General Lanes Strategy: The Add General Lanes Strategy would improve the traffic flow. There are no expected

undesirable congestion locations in the 2030 future forecasts along the I-70 corridor. The HCS results for the Add General Lanes Strategy are shown graphically in **Appendix D**.

The reduced congestion from the Add General Lanes Strategy would also benefit goods movement along I-70. Some companies have limited truck deliveries during the peak tend to avoid congested roadways like I-70 during the commuter morning and afternoon commutes to minimize lost time for drivers and achieve more reliable delivery times. However, the additional lanes would assist the movement of freight during less congested times as well.

<u>Transportation Improvement</u> Corridor Strategy: The Transportation Improvement Corridor Strategy improve the traffic flow. There are no expected congestion locations in the future forecasts along the I-70 corridor. The HCS results for the Transportation Improvement Corridor Strategy are shown graphically in **Appendix D**. The reduced congestion from the Transportation Improvement Corridor Strategy would also benefit goods movement along I-70. If the use of the Transportation Improvement Corridor is focused on improving transportation of people, such as transit solutions, car pool lanes, or other lanes that only passenger vehicles can use, then the benefits of the improvement would not be as high for goods movement. However, trucks would still benefit from less congestion on the regular lanes.

How well will the First Tier Strategies Improve Safety?

The Study Team completed a safety analysis that evaluated crash data covering a five year period (2003 to 2007). The safety analysis identified the downtown loop, five eastbound, and three westbound sections in the Study Area that exceeded the statewide average crash rate for urban interstates. The locations with crash rates more than 150 percent of the statewide average crash rate are highlighted in the crash summary shown in **Table 2.4**.

Table 2.4 I-70 FTEIS Crash Rate Summary

				<u>-</u>	5 Year C	rash Rate	
			2003 to 2007 Crash Rate		versus S	tatewide	
			(Crashes Per 100 Million		Average C	Crash Rate*	
		Length	Vehicle Mil	les of Travel)	(10)	7.82)	
	Analysis Sections	(miles)	Eastbound	Westbound	Eastbound	Westbound	
1	Downtown Loop	3.45	34	0.50	31	6%	
2	Paseo Blvd Interchange	0.86	161.41	227.10	150%	211%	
3	Benton Curve	1.20	154.84	211.11	144%	196%	
4	23 rd St Interchange	0.67	93.76	61.35	87%	57%	
5	Jackson Curve	0.88	234.57	90.07	218%	84%	
6	Van Brunt Blvd Interchange	0.73	238.13	128.44	221%	119%	
7	U.S. 40 West Interchange	0.59	186.80	98.21	173%	91%	
8	Manchester Ave Interchange	0.57	211.48	114.95	196%	107%	
9	I-435 Interchange	0.96	189.01	213.37	175%	198%	
10	Blue Ridge Cutoff Interchange	1.28	136.12	149.12	126%	138%	
11	U.S. 40 East Interchange	1.60	141.61	114.05	131%	106%	
12	Noland Rd Interchange	1.50	140.11	132.24	130%	123%	
13	Lee's Summit Rd Interchange	1.35	113.50	106.52	105%	99%	
14	I-470 Interchange	1.51	131.95	111.28	122%	103%	
	Totals		182.79 170%			0%	
* Statewide average crash rate for urban interstates.							

The Study Area sections with the highest crash rates include the downtown loop, westbound from the downtown loop to 23rd Street, and eastbound from I-435 to the Jackson curve. The Study Team then evaluated the strategies to determine if they provide improvements to address the high crash locations in the Study Area.

<u>No-Build Strategy</u>: The No-Build Strategy has improvements in two areas where safety is a concern along the corridor. The kcICON project will provide improvements in the northeast corner of the downtown loop and at the I-435 Interchange. None of the other high crash locations would be addressed. It is possible that overall safety would decline as the corridor becomes increasingly congested with stop and go traffic flows.

<u>Improve Key Bottlenecks Strategy</u>: The Improve Key Bottlenecks Strategy would provide improvements that would improve safety including: lane balance and access consolidation in the downtown loop, improvements to the Benton curve and the Jackson curve, upgrade the I-435

Interchange to an ultimate interchange design such as the concept identified in the <u>Access Justification Report I-70 and I-435 Interchange Area</u>, and ramp improvements at Paseo Boulevard, U.S. 40 west, and Manchester Avenue. These would be all of the locations where there are high crash concerns.

Add General Lanes Strategy: The Add General Lanes Strategy would provide improvements that would improve safety including: lane balance and access consolidation in the downtown loop, improvements to the Benton curve and the Jackson curve, upgrade the I-435 Interchange to an ultimate interchange design such as the concept identified in the <u>Access Justification Report I-70 and I-435 Interchange Area</u>, and ramp improvements at Paseo Boulevard, U.S. 40 west, and Manchester Avenue. These would be all of the locations where there are high crash concerns.

<u>Transportation Improvement Corridor Strategy</u>: The Transportation Improvement Corridor Strategy would provide improvements that would improve safety including: lane balance and access consolidation in the downtown loop, improvements to the Benton curve and the Jackson curve, upgrade the I-435 Interchange to an ultimate interchange design such as the concept identified in the <u>Access Justification Report I-70 and I-435 Interchange Area</u>, and ramp improvements at Paseo Boulevard, U.S. 40 west, and Manchester Avenue. These would be all of the locations where there are high crash concerns.

How well will the First Tier Strategies Enhance Accessibility Along and Across the Corridor?

For each of these strategies the Study Team evaluated locations that would provide potential for access improvements for local traffic, transit, pedestrians, and cyclists across and along the corridor. The design details of these improvements including potential rehabilitation of bridges across the interstate to enhance bicycle and pedestrian connections and the use of community bridges will be fully evaluated in the Second Tier studies.

<u>No-Build Strategy:</u> The No-Build Strategy does have committed improvements at the Blue Ridge Cutoff Bridge that will enhance the accessibility across the corridor via improved sidewalks. No other improvements for accessibility across the freeway are planned.

Improve Key Bottlenecks Strategy: The Improve Key Bottlenecks Strategy would enhance the accessibility along and across the corridor through improvements at Paseo Boulevard, Truman Road, 23rd Street, U.S. 40 west, and Blue Ridge Cutoff which would provide for improved pedestrian crossings. Improvements that would allow buses to use the shoulder of the freeway during congested times would also improve access along the corridor for transit users by making transit a more efficient way to get around.

Add General Lanes Strategy: The Add General Lanes Strategy would enhance the accessibility along and across the corridor through improvements at the interchanges and overpasses noted in the Improve Key Bottlenecks Strategy plus the interchanges at Woodland Avenue, Prospect Avenue, 18th Street, Jackson Avenue, Van Brunt Boulevard, U.S. 40 east, and Lee's Summit Road. In addition, four overpasses would be rebuilt at Cleveland Avenue, Chrysler Avenue, Pittman Road, and Phelps Road to accommodate the additional lanes. Rebuilt bridges across I-70 could also enhance bicycle and pedestrian connections. Improvements that would allow buses to use the shoulder of the freeway during congested times would also improve access along the corridor for transit users by making transit a more efficient way to get around.

Transportation Improvement Corridor Strategy: The Transportation Improvement Corridor Strategy would enhance the accessibility along and across the corridor through improvements at the interchanges and overpasses noted in the Improve Key Bottlenecks Strategy plus the interchanges at Woodland Avenue, Prospect Avenue, 18th Street, Jackson Avenue, Van Brunt Boulevard, U. S. 40 east, and Lee's Summit Road. In addition, four overpasses would be rebuilt at Cleveland Avenue, Chrysler Avenue, Pittman Road, and Phelps Road to accommodate the transportation improvement corridor. Rebuilt bridges across I-70 could also enhance bicycle and pedestrian connections. Bus uses in the

Transportation Improvement Corridor would also improve access along the corridor for transit users by making transit a more efficient way to get around.

How much would the First Tier Strategies Costs?

The following discussion includes estimated construction and right of way costs for the strategies. In the Second Tier studies, more detailed design would be completed that would result in more refined cost estimates and could reduce the right of way requirements and costs. All of the cost estimates are in current 2009 dollars.

No-Build Strategy: The No-Build Strategy would cost an estimated \$8.1 million dollars a year in on-going maintenance and operational costs over the next 30 years. This represents a total cost of approximately \$250 million between 2009 and 2035.

Improve Key Bottlenecks Strategy: The Improve Key Bottlenecks Strategy is estimated to cost \$580 million to construct and an additional \$157 million in right of way acquisition costs. The total estimated cost is \$737 million.

Add General Lanes Strategy: The Add General Lanes Strategy is estimated to cost \$680 million to construct and an additional \$185 million in right of way acquisition costs. The total estimated cost is \$865 million.

What is meant by Identified Preferred Strategy?

The Identified Preferred Strategy is not the Final Preferred Strategy. Comments on the DEIS and at the public hearing on the DEIS may result in changes to the Identified Preferred Strategy.

<u>Transportation Improvement Corridor Strategy:</u> The Transportation Improvement Corridor Strategy is estimated to cost \$840 million to construct and an additional \$208 million in right of way acquisition costs. The total estimated cost is \$1,048 million.

2.5 The Identified Preferred Strategy

The I-70 FTEIS Identified Preferred Strategy is the Improve Key Bottlenecks Strategy in the downtown loop to east of I-435. From east of I-435 to I-470, the Identified Preferred Strategy is to carry either the Improve Key Bottlenecks Strategy or the Add General Lanes Strategy into the Second Tier studies. **Figure 2.9** at the end of this chapter shows the

Identified Preferred Strategy. The Transportation Improvement Corridor Strategy would be eliminated from consideration. The following paragraphs describe the Identified Preferred Strategy in the various Sub-Areas of the corridor.

Corridor Wide Improvements: The Identified Preferred Strategy would rebuild and/or rehabilitate I-70 and the downtown loop to its existing configuration with a design life of 30 to 50 years. This includes pavement, roadbed, and structure improvements. The Identified Preferred Strategy will evaluate interchange improvements to address ramp lengths, merge areas, and weave sections at all interchanges. Other corridor wide improvements in the Identified Preferred Strategy include integrating Operation Green Light on parallel routes, improving incident management response times to clear incidents and stalled vehicles, coordination with Smart Moves Regional Transit Vision, improving non-motorized access across I-70 and the downtown loop with a Community Bridges, and investigating locations to add Park and Ride lots as necessary.

<u>Downtown Sub-Area:</u> The downtown loop improvements in the Identified Preferred Strategy include lane balance and improvements in the northeast corner of the downtown loop as part of the kcICON project. This strategy would also consider interchange additions, consolidations, modifications, and/or eliminations to improve traffic flow and safety.

The Identified Preferred Strategy would consider the on-going South Loop Link Study to evaluate the possibility of enclosing the south leg of the downtown loop to expand development opportunities in the downtown. The Second Tier Studies will coordinate with that planning effort and consider the recommended improvements from that study. In addition, the Wyandotte on-ramp to westbound I-670 was removed during the Bartle Hall expansion. There was a commitment to replace this ramp at a future date. The need to replace this connection or not and where the ramp would be located are issues that will be evaluated in the Second Tier Studies.

<u>Urban Sub-Area</u>: The Identified Preferred Strategy includes the bridge rehabilitation from Paseo Boulevard to Van Brunt Boulevard. I-70 would be rebuilt to provide for bus transit on the shoulder. I-70 curves at Benton Boulevard and Jackson Avenue would be improved within the available right of way to the extent possible. The strategy will consider interchange consolidations, modifications with CD roads, and/or elimination of access at 18th Street to improve traffic flow and safety.

<u>I-435 Sub-Area</u>: In addition to the project currently programmed in the STIP as described in the No-Build Strategy, MoDOT will continue to modify the freeway access along I-70 and I-435 to relieve congestion and improve the condition of the system in the I-435 and I-70 interchange area. Similar to the programmed STIP project, the proposed improvements include adding lanes to I-435; modifying ramps into a collector-distributor system on I-70 and I-435 and extending ramps at several locations for additional weave, merge and diverge area; reconstructing and relocating the fully directional ramps to eliminate left-side exits from the interstate. These proposed improvements reduce congestion, improve safety and address bridge maintenance needs in the interchange area.

The Identified Preferred Strategy would also evaluate the need to modify access at the Manchester Trafficway Interchange.

Suburban Sub-Area: The final improvement strategy decision would be made in the Second Tier studies. If the Improve Key Bottlenecks Strategy is selected, I-70 would be rebuilt through this area and provide for bus transit on the shoulder. All bridges from Blue Ridge Cutoff to U.S. 40 east would be rehabilitated per MoDOT programmed bridge projects, except the Noland Road Bridge which was recently rebuilt. The Identified Preferred Strategy would also evaluate the need to modify, consolidate, or eliminate the series of Sterling Avenue, U.S. 40 east, and Blue Ridge Boulevard interchanges.

If the Add General Lanes Strategy is selected, I-70 would be rebuilt with eight lanes through this area. I-70 between Blue Ridge Cutoff and I-470 would have bridge rehabilitation of all bridges from U.S. 40 east to I-435 per MoDOT programmed bridge projects, except the Noland Road Bridge which was recently rebuilt. All bridge structures would be rebuilt to

accommodate the additional lanes. Transit improvements would include bus on shoulder operations.

The Identified Preferred Strategy would I-470 Sub-Area: include modifications at the I-70/I-470 interchange that would work with either the Improve Key Bottlenecks Strategy or the Add General Lanes Strategy. Improvements at the I-70/I-470 interchange would also be designed to connect with improvements identified in the I-470 Purpose and Need Study or the I-70 Statewide Study. The Identified Preferred Strategy would address short ramps and merging issues on I-70 and I-470 at the interchange between the two freeways. I-70 would be rebuilt through the I-470 interchange and would provide for bus transit on the shoulder. Interchange improvements would include either a collector distributor road system or improvements to the interchange ramps to eliminate some of the interchange weaving areas. I-470 would require interchange improvements at U.S. 40 and 39th Street to maintain access if there are new ramps and I-470 mainline improvements to join the new ramps with I-470 traffic. I-70 would also require some ramp modifications.

Why was the Identified Preferred Strategy Proposed?

This section discusses why MoDOT identified the Improve Key Bottlenecks Strategy in the downtown loop to east of I-435 and the decision to leave the final strategy open to either the Improve Key Bottlenecks Strategy or Add General Lanes Strategy from east of I-435 to I-470.

The Study Team identified the Improve Key Bottlenecks Strategy in the downtown loop to east of I-435 for the following reasons:

- It addresses the purpose and need for improving I-70 as identified in Chapter 1.
- It reduces peak hour congestion to LOS E or better.
- It has the lowest need to acquire properties and relocations of homes and businesses, especially in the environmental justice areas for the Build Strategies.
- It has the lowest human and natural environmental impacts for the Build Strategies.
- It has the lowest estimated cost of the Build Strategies.

What is the I-70 Statewide Study?

MoDOT is looking at how to best rebuild I-70 between Independence and Lake St. Louis. The purpose and need of the project include increasing roadway capacity, improving traffic safety, upgrading roadway design features, preserving the existing corridor, improving the efficiency of goods movement, improving access to recreational facilities, and improving this corridor for national security and disaster preparedness.

- It improves access across the freeway.
- It improves transit service with bus on shoulder.
- It restores and/or rebuilds the existing infrastructure.

From east of I-435 to I-470, the Identified Preferred Strategy is to leave the decision open for the Second Tier studies to decide. The Identified Preferred Strategy is to carry both the Improve Key Bottlenecks Strategy and the Add General Lanes Strategy with an option to stripe a HOV/Bus lane forward to the Second Tier studies.

<u>Identified Preferred Strategy Traffic Forecast</u>

The Study Team decided to conduct traffic analysis on a combined strategy because the Improve Key Bottlenecks Strategy relieves congestion west of I-435, but not east of I-435. The Study Team evaluated a combination of the Improve Key Bottlenecks Strategy west of I-435 and the Add General Lanes Strategy east of I-435 to I-470. The combined traffic analysis results indicate the same two locations with undesirable congestion west of I-435 as were identified for the Improve Key Bottlenecks Strategy. Additional design measures in the Second Tier studies are anticipated to effectively address these two locations where congestion is still a concern. By using the Add General Lanes Strategy east of I-435, it continued to provide relief to all undesirable congestion east of I-435.

Although the traffic model indicates the need for additional lanes on I-70 from east of I-435 to I-470, several factors make this conclusion uncertain between now and 2030. As a result, the Study Team proposes leaving the final decision on adding lanes east of I-435 to the Second Tier studies. The factors and issues leading to this conclusion include:

- Uncertainty in how much traffic levels are going to increase. Higher gas prices have caused reductions in national and regional vehicle miles traveled in recent years.
- Uncertainty about the compatibility of the Add General Lanes Strategy with the sustainability goals of MARC's 2040 Long Range Transportation Plan update. If this plan results in a strategy for much more compact

- development, additional road capacity may not be needed.
- Uncertainty of the Add General Lanes Strategy compatibility with future regional transit plan investments such as a fixed guide way system. Improving capacity in the I-70 corridor could potentially be solved be either adding new lanes to I-70 or through regional transit improvements. However, a significant investment to both potential highway and transit solutions is not necessary. If the region, supported by regional transit plans, concludes a significant transit investment would adequately address the traffic needs in the I-70 corridor, MoDOT, working with the region, would reevaluate the decision in the tiered environmental process.
- Potential federal climate change and vehicle emissions legislation. Congress is considering legislation that may focus transportation improvements on those that reduce driving instead of those that add capacity.

Delaying the final improvement decision until the Second Tier studies would be a cost effective use of public dollars given the uncertainties noted above. This strategy avoids committing to a solution that may be undesirable given future policy changes and thus requiring reopening this First Tier study.

The I-70 FTEIS would provide environmental evaluation for the wider of the two footprints (Add General Lanes Strategy) to ensure appropriate environmental impact analysis is conducted prior to the Second Tier studies.

The Transportation Improvement Corridor Strategy using fixed barriers for a specialty corridor was eliminated from further consideration. The option to stripe a HOV/Bus lane would be carried forward with the Add General Lanes Strategy. The barrier separated specialty corridor would not be carried forward for the following reasons:

 Over builds the freeway to more pavement than is needed. This is an inefficient use of limited public dollars.

- The highest property impacts and relocates the most homes and businesses.
- The most severe Environmental Justice area impacts.
- The highest human and natural environment impacts.
- The highest expected estimated cost.

What will the Identified Preferred Strategy Cost?

The Identified Preferred Strategy is estimated to cost between \$740 and \$760 million to construct depending on which scenario is selected east of I-435.

What are the Next steps in the Analysis?

A public comment period of no less than 45 days will follow the publication of this Draft FTEIS document. During the comment period MoDOT will hold a formal Public Hearing in the Study Area. MoDOT will also hold a series of Mobile Meetings, host an on-line presentation and comment option, and attend further speaking engagements to talk about the study. The public and stakeholders can attend any one of these events or send comments on this Draft FTEIS and the Strategies to the addresses listed on the first page of the document.

Following the Public Hearing and Comment period, the Study Team will use the input provided by the public, stakeholders, and agencies to help refine the Identified Preferred Strategy. The Study Team will produce a Final FTEIS document that updates the Identified Preferred Strategy and addresses the comments received. The Federal Highway Administration will then issue a Record of Decision that will formally select the strategy to move forward into the Second Tier studies. The next step would be to conduct the Second Tier studies which will further evaluate and refine the impacts of the Identified Preferred Strategy. The Second Tier studies will refine the right of way affected and acquired by the project to avoid, minimize, or mitigate the identified effects of the I-70 improvements where possible.

How would the Identified Preferred Strategy be divided into Second Tier studies?

For the Second Tier studies, the portion of I-70 covered by this FTEIS as well as the downtown loop will be divided into Sections of Independent Utility. At this time, the proposed Sections of Independent Utility are the five Sub-Areas in **Figure 3.0** at the end of **Chapter 3**. Descriptions of the five Sub-Areas are as follows:

- <u>Downtown Sub-Area</u>: The downtown loop (the FTEIS Study Area west of Tracy Avenue). This makes the Kansas City Downtown Loop its own Section of Independent Utility. This second tier study would consider the results of the South Loop Link Study and the replacement of the Wyandotte ramp to I-670 as committed during in the Bartle Hall expansion project.
- <u>Urban Sub-Area</u>: The downtown loop to west of I-435 (Tracy Avenue to Topping Avenue).
- <u>I-435 Sub-Area</u>: West of I-435 to east of I-435 (Topping Avenue to east of Blue Ridge Cutoff). This corresponds to the approximate limits of the existing I-435/I-70 interchange improvements that MoDOT is undertaking.
- <u>Suburban Sub-Area</u>: East of I-435 to west of I-470 (East of Blue Ridge Cutoff to east of Lee's Summit Road).
- <u>I-470 Sub-Area:</u> West of I-470 to east of I-470 (East of Lee's Summit Road to the east limits of the Study Area). This Section of Independent Utility would allow for incorporation of improvements on I-70, I-470, and MO-291 in the vicinity of the interchange.

The Study Team believes that these are logical Sections of Independent Utility that have rational endpoints (called logical termini). This is a preliminary recommendation on dividing the corridor into Second Tier studies that will be refined and expanded upon as the Identified Preferred Strategy is refined. There will be further discussion in the Final FTEIS.

What is a Section of Independent Utility?

A Section of Independent Utility (SIU) is a section of a larger project that can function on its own, without further construction of an adjoining road section required.

Table 2.2 First Tier Strategy Package Screening



Achieved = 100% or highest benefit



Mostly Achieved = 80% or moderately high benefit



Moderately Achieved = 50% or moderate benefit





Not Achieved = 0% or no benefit

_	Definition/Clarification	Indicators	Strategy Package*					
Evaluation Factor			No-Build	Improve Key Bottlenecks	Add General Lanes Capacity	Transportation Improvement Corridor	Notes	
Safety						,		
Crash Reduction	Evaluate with respect to reduction in crash rate	Addresses all or most of locations with crash rates above statewide average	\oplus					
		Improves I-70 curves	\oplus	—	—	—		
		Number of interchanges where geometrics are improved	3	10	19	17		
Compliance with MoDOT Access Management Guidelines	Evaluate how well the proposed strategy package provides for the opportunity to implement Access Management Guidelines		\oplus	—	—	—		
Congestion Relief								
Traffic Operations/ Congestion Relief	Evaluate the strategies from a traffic operations standpoint based on Level of Service.	Miles of LOS F in 2030	Total 12.5 West of I-435 – 2.3 East of I-435 – 10.2	Total 6.2 West of I-435 – 0.5** East of I-435 – 5.7	Total 0.0	Total 0.0	**Can be corrected with a different bottleneck improvement	
Restore/Maintain Existing Infras	structure							
Restore & Maintain Existing Infrastructure	Evaluate the Corridor wide rehabilitation and/or rebuilding of existing highway either in place or as part of capacity expansion	Rehabilitates and/or rebuilds existing highway in place or as part of capacity expansion	\oplus	—	—	—		
Improve Accessibility								
Improve accessibility across/neighborhood	Evaluate how well strategy package improves neighborhoods and communities accessibility	Number of Interchange and Overpass Reconfigurations	3	10	24	22		
		Bicycle and/or Pedestrian accommodations and/or improvements proposed	\oplus	—	—	—		
Improve Public Transportation	Evaluate potential for strategy package to improve public transportation	Adds Park & Ride	\oplus	—	—	—		



Achieved = 100% or highest benefit



Mostly Achieved = 80% or moderately high benefit



Moderately Achieved = 50% or moderate benefit





Not Achieved = 0% or no benefit

	Definition/Clarification	Indicators	Strategy Package*					
Evaluation Factor			No-Build	Improve Key Bottlenecks	Add General Lanes Capacity	Transportation Improvement Corridor	Notes	
		Support Operation Green Light	\oplus	—		-		
		Integrate Smart Moves Transit Plan	\oplus		—	—		
Improve Goods Movement								
Improve Goods Movement	Strategy package effectively serves freight movements in corridor	Improves Freight Movement	\oplus	—	—	—		
Social and Economic								
Relocations	Evaluate the impact on residences and businesses to be displaced	Residential – Single family (each) Residential – Multi-family (each)	0	170 18	271 32	399 45		
		Commercial/Industrial (each) Churches (each)	0	55 0	93 4	111 7		
		Schools (each)	0	1	1	1		
Environmental Justice	Evaluate the impact to low income and/or minority areas	Area of property affected (each)	0 Single Family 0 Multi-family	51 Single Family 5 Multi-family	95 Single Family 18 Multi-family	160 Single Family 28 Multi-family	EJ area identified as west of the Blue River	
Public Facilities & Services	Evaluate the impact to facilities and services used for public uses	Number of facilities (each)	0	3	11	12		
Environment								
Noise	Evaluate potential impact on existing sensitive receptors (residences, schools, churches, parks)	Proximity to sensitive noise receptor (number within 150 feet of proposed future edge of pavement)	664	465	335	282		
Parks/Recreational Land	Evaluate potential impact on parks	Number of park/recreational lands affected (each)	0	6	10	9		
Historic Property	Evaluate potential impact on historic properties	Number of historic properties impacted(buildings on or eligible for NRHP (each)	0	0	0	0	17 historic structures in the downtown area adjacent to the project area. None are expected to be directly impacted	
Historic Districts	Evaluate potential impact on historic district	Area of historic district impacted (each)	0	0	0	0	Four Historic districts in the downtown area adjacent to the project area None are expected to be directly impacted	
Archaeological Site	Evaluate potential impact to archeological sites	Number of potential archaeological locations (each)	0	7	9	9	These are not known sites but identified locations with potential for archaeological sites	
Water Resources	Evaluate potential impact to rivers and streams	Encroachment on the Blue River (Fatal Flaw, Large, Moderate,	None	Minor	Minor	Minor		

I-70 First Tier Draft EIS - Alternatives Considered

Table 2.2 – Page 2 of 3



Achieved = 100% or highest benefit



Mostly Achieved = 80% or moderately high benefit



Moderately Achieved = 50% or moderate benefit





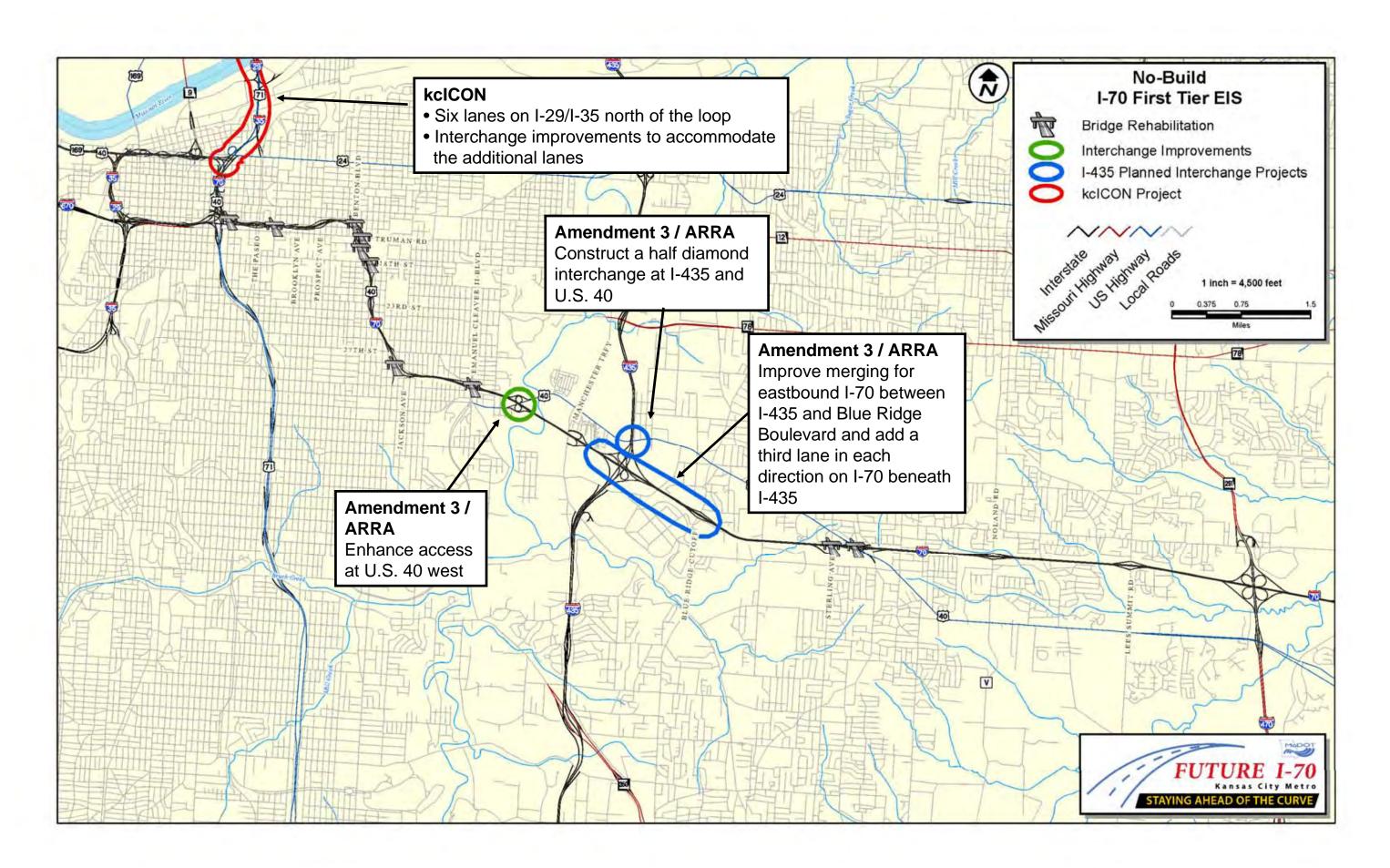
Not Achieved = 0% or no benefit

Evaluation Factor	Definition/Clarification	Indicators	Strategy Package*					
			No-Build	Improve Key Bottlenecks	Add General Lanes Capacity	Transportation Improvement Corridor	Notes	
		Minor, None)						
		Number of streams/tributaries crossed (each)	0	8	10	10		
Floodplains	Evaluate potential impact on floodplains	Area of floodplain affected (acres)	0	19 acres	21 acres	24 acres		
Wetlands	Evaluate potential impact on wetlands	Area of emergent wetland affected (acres)	0	0.9 acres	0.9 acres	0.9 acres		
		Area of forested/shrub wetland affected (acres)	0	0.48 acres	1.13 acres	1.09 acres		
Known Hazardous Waste Sites	Evaluate potential impact on known hazardous waste sites	Number of sites affected (each)	0	0	0	0		
Forested Areas	Evaluate potential impact on forested areas	Area of sites affected (acres)	0	57 acres	69 acres	69 acres		
Cost								
Land Acquisition Cost	Opinion of probable land acquisition cost	Right of Way Cost (millions)	\$0	\$157	\$185	\$205		
Construction Cost	Opinion of probable construction cost	Total Construction Cost (millions)	\$8.1 annual maintenance	\$580	\$680	\$840		
Total Costs	Opinion of total cost	Total Cost (millions)	\$250	\$737	\$865	\$1,045	Identified Preferred Scenario cost estimate is between \$740 and \$760 million depending on the scenario selected east of I-435	

^{*}The Strategy Packages that are a part of this screening process have been screened against the Purpose and Need in the Initial Screening Evaluation. The No-Build does not meet the goals of the Purpose and Need but is required by NEPA to be carried forward for further evaluation. A detailed description of how the evaluation factors were measured qualitatively using the Achieved to Not Achieved Scale is included in Appendix C.

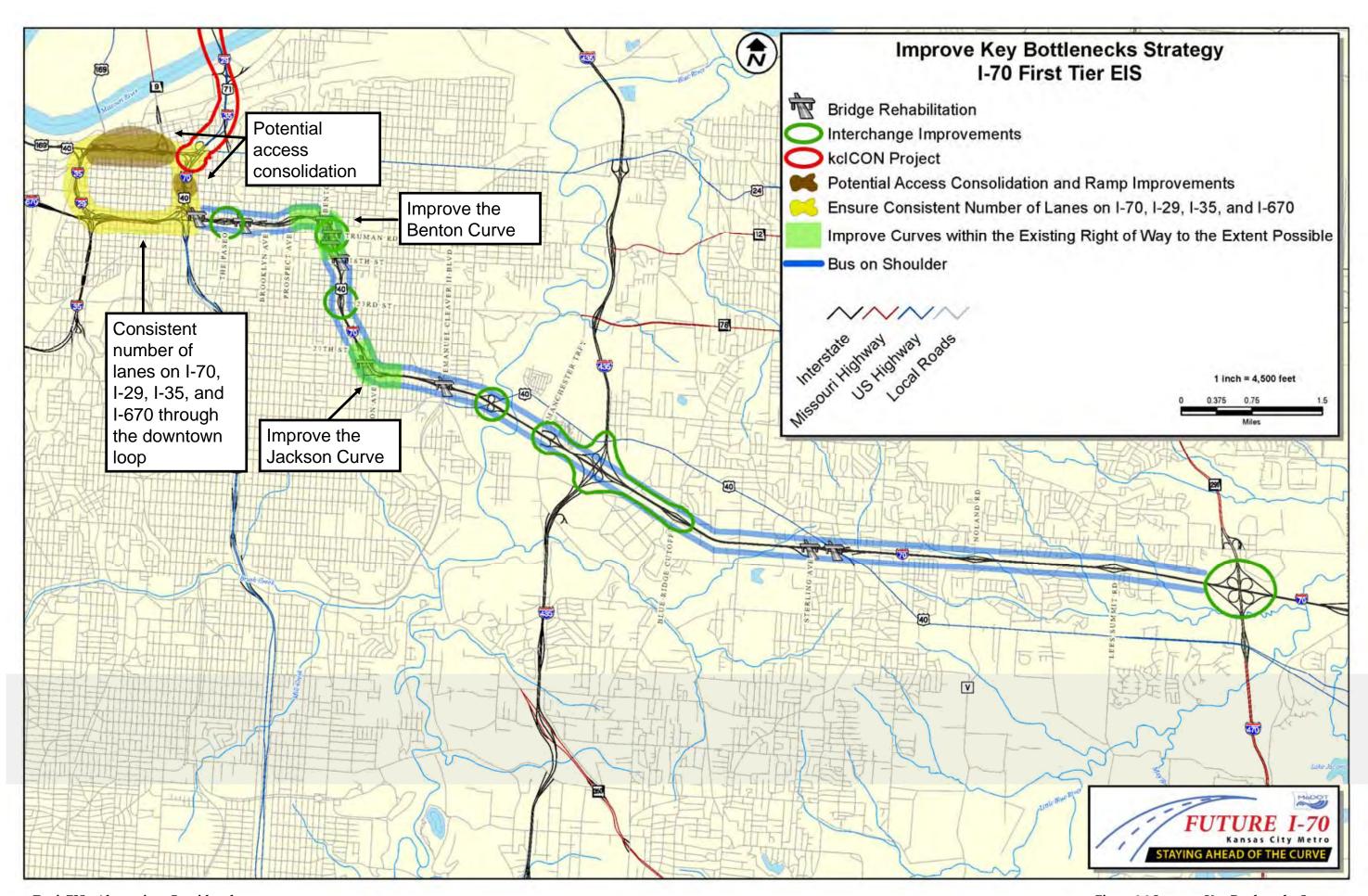
I-70 First Tier Draft EIS - Alternatives Considered

Table 2.2 – Page 3 of 3

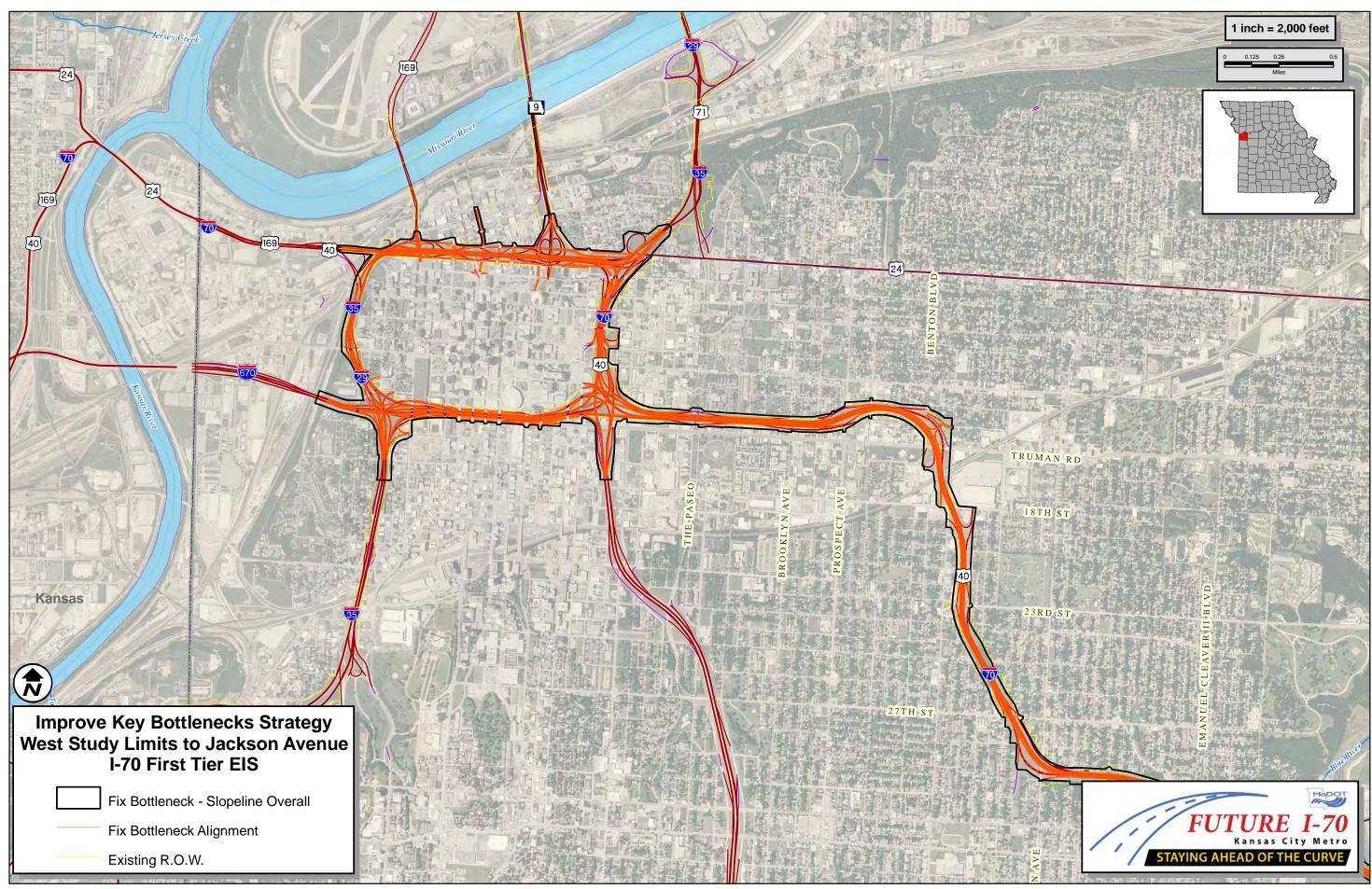


Draft EIS - Alternatives Considered

Figure 2.1 No-Build Strategy

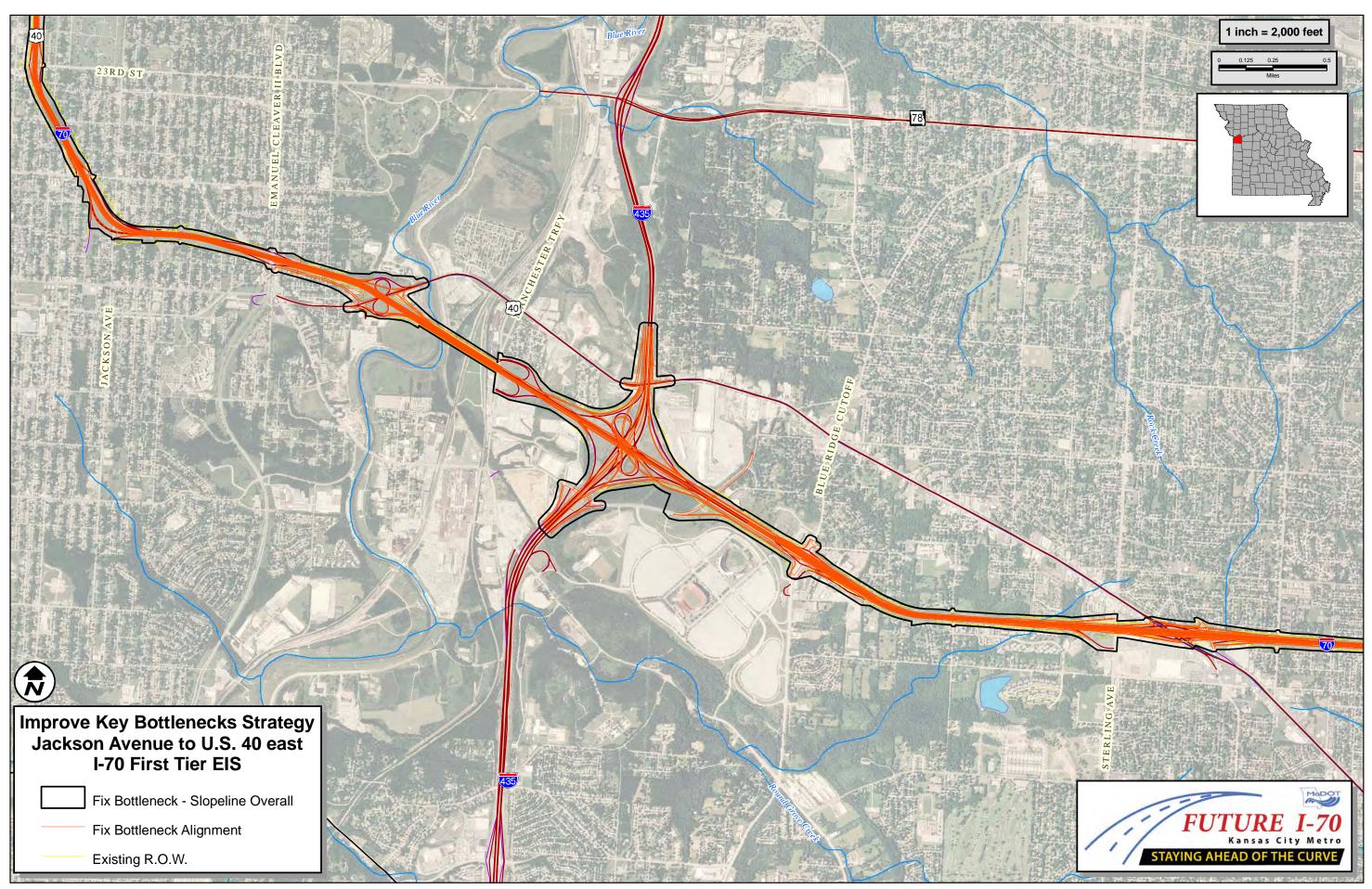


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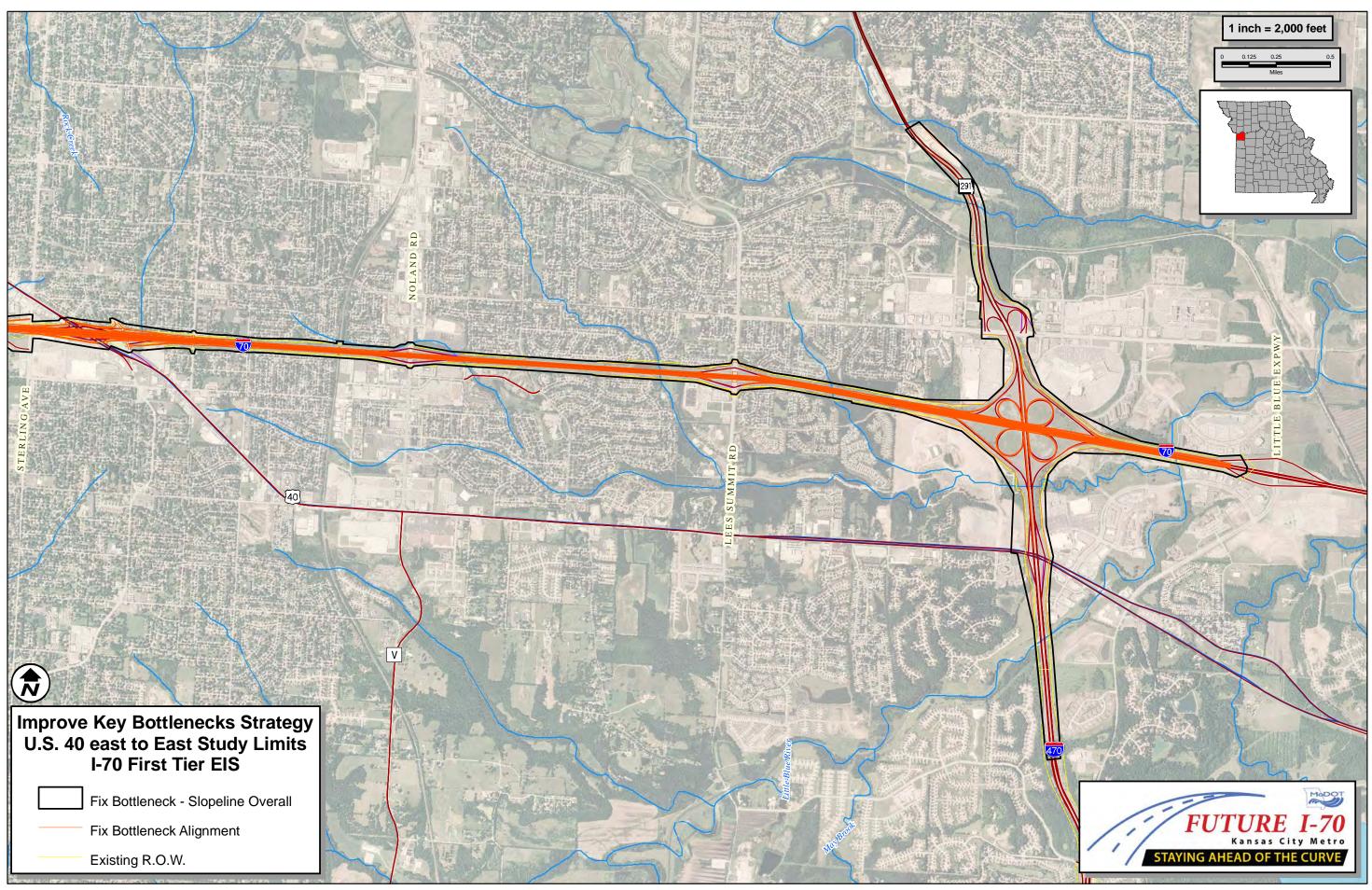
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Figure 2.3 Improve Key Bottlenecks Strategy - West Study Limits to Jackson Avenue



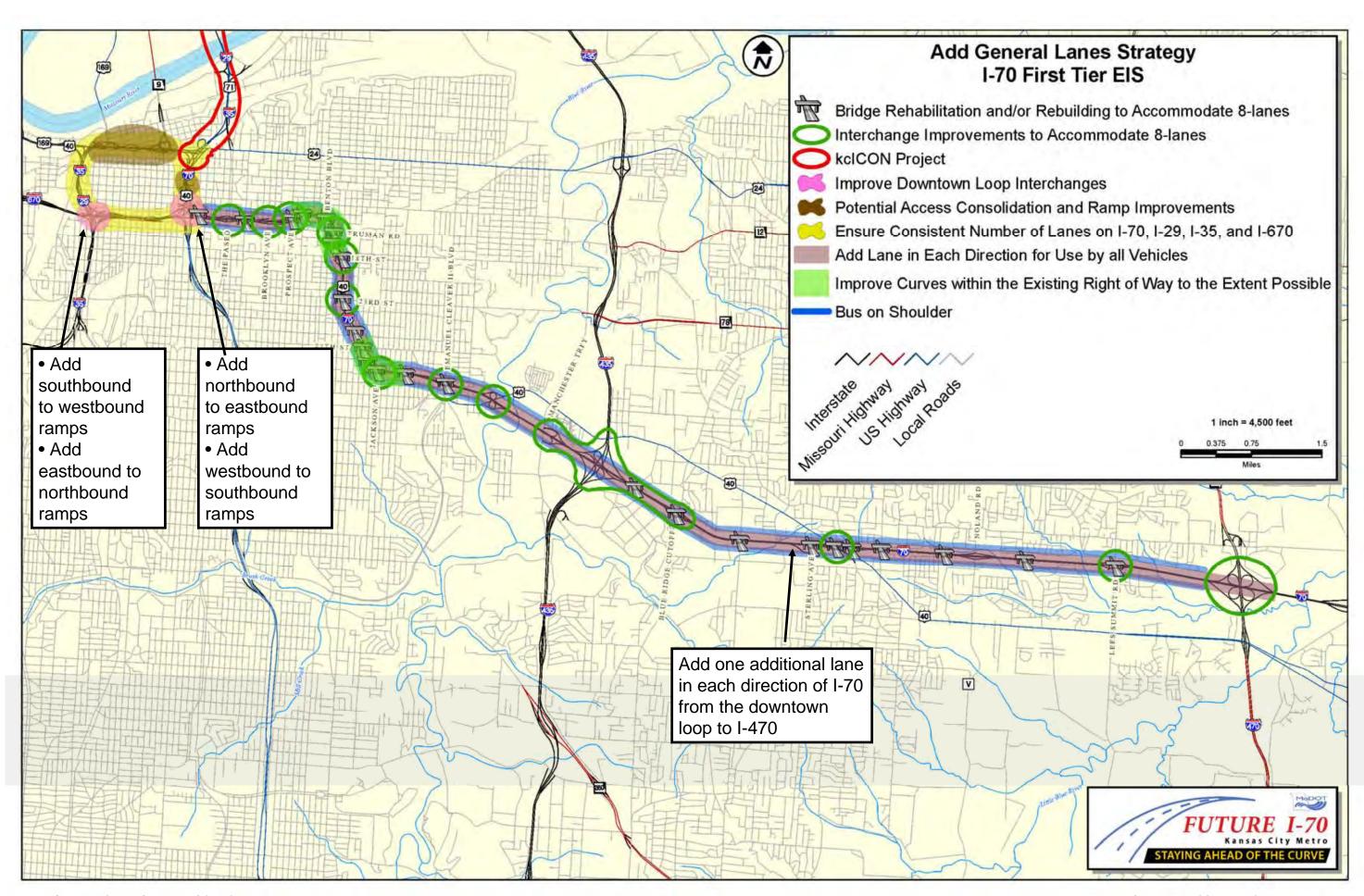
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Figure 2.3 Improve Key Bottlenecks Strategy - Jackson Avenue to U.S. 40 east

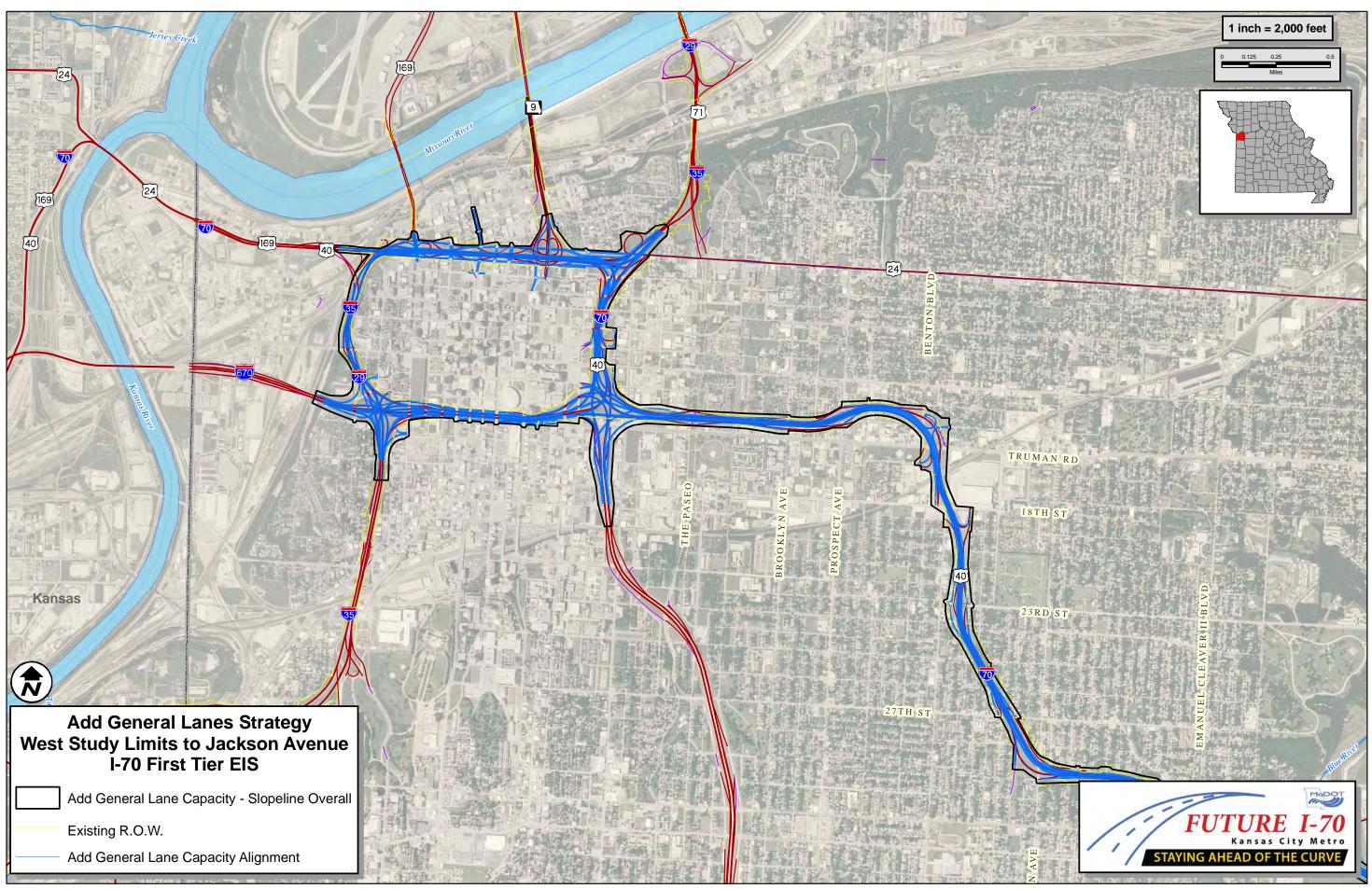


Draft EIS - Alternatives Considered

Figure 2.3 Improve Key Bottlenecks Strategy - U.S. 40 east to East Study Limits

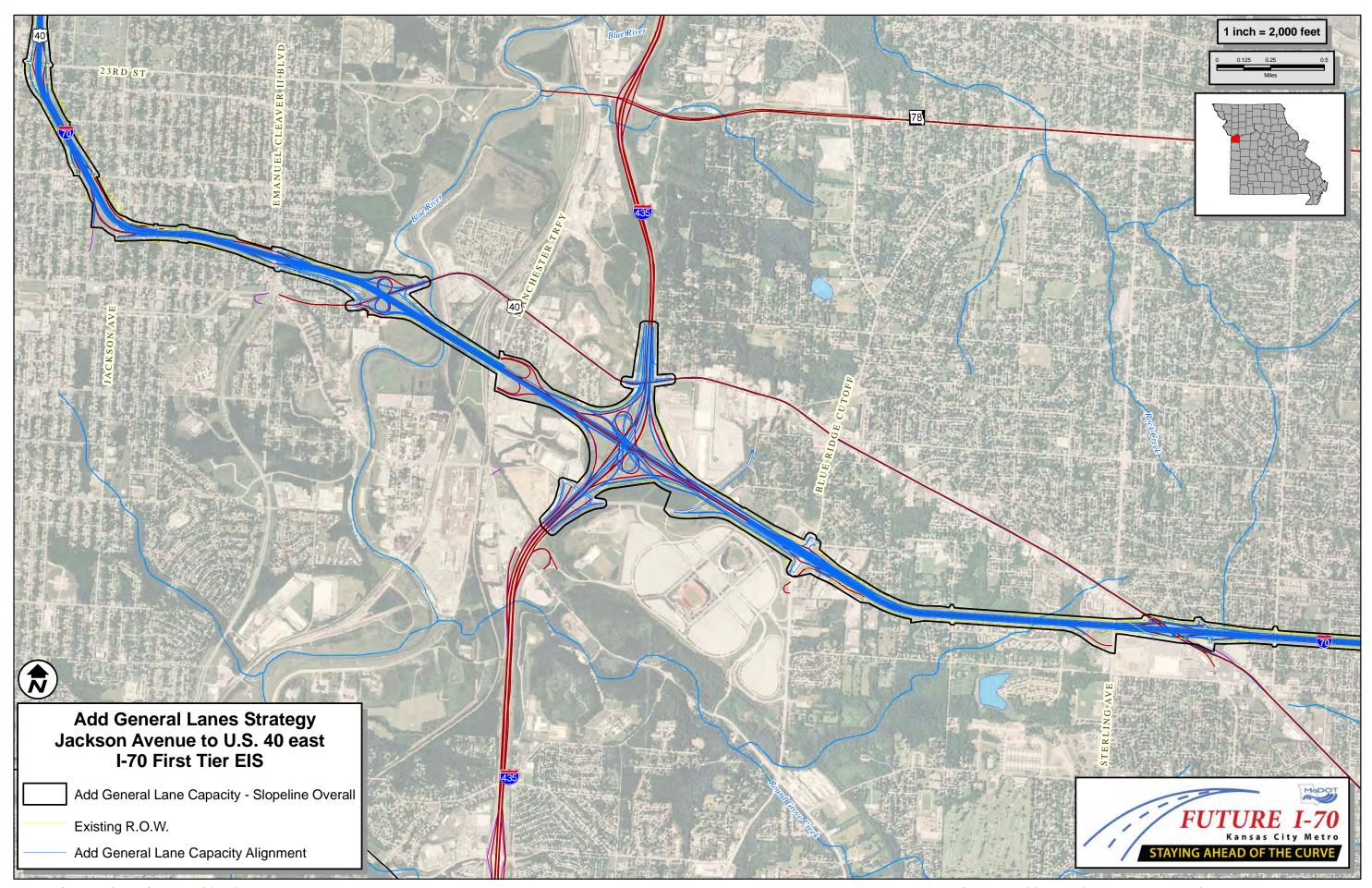


Draft EIS - Alternatives Considered Figure 2.4 Add General Lanes Strategy

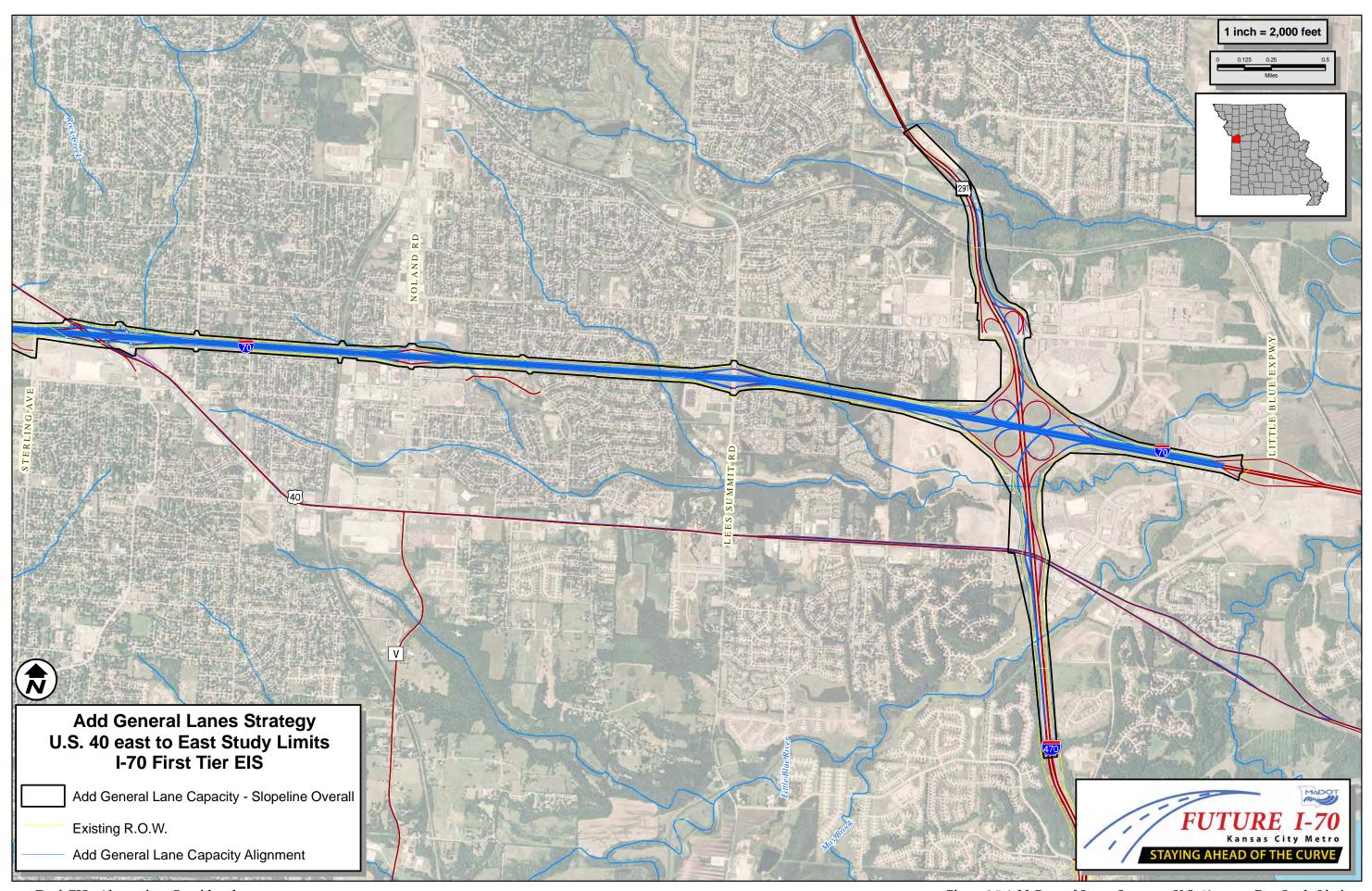


Draft EIS - Alternatives Considered

Figure 2.5 Add General Lanes Strategy - West Study Limits to Jackson Avenue

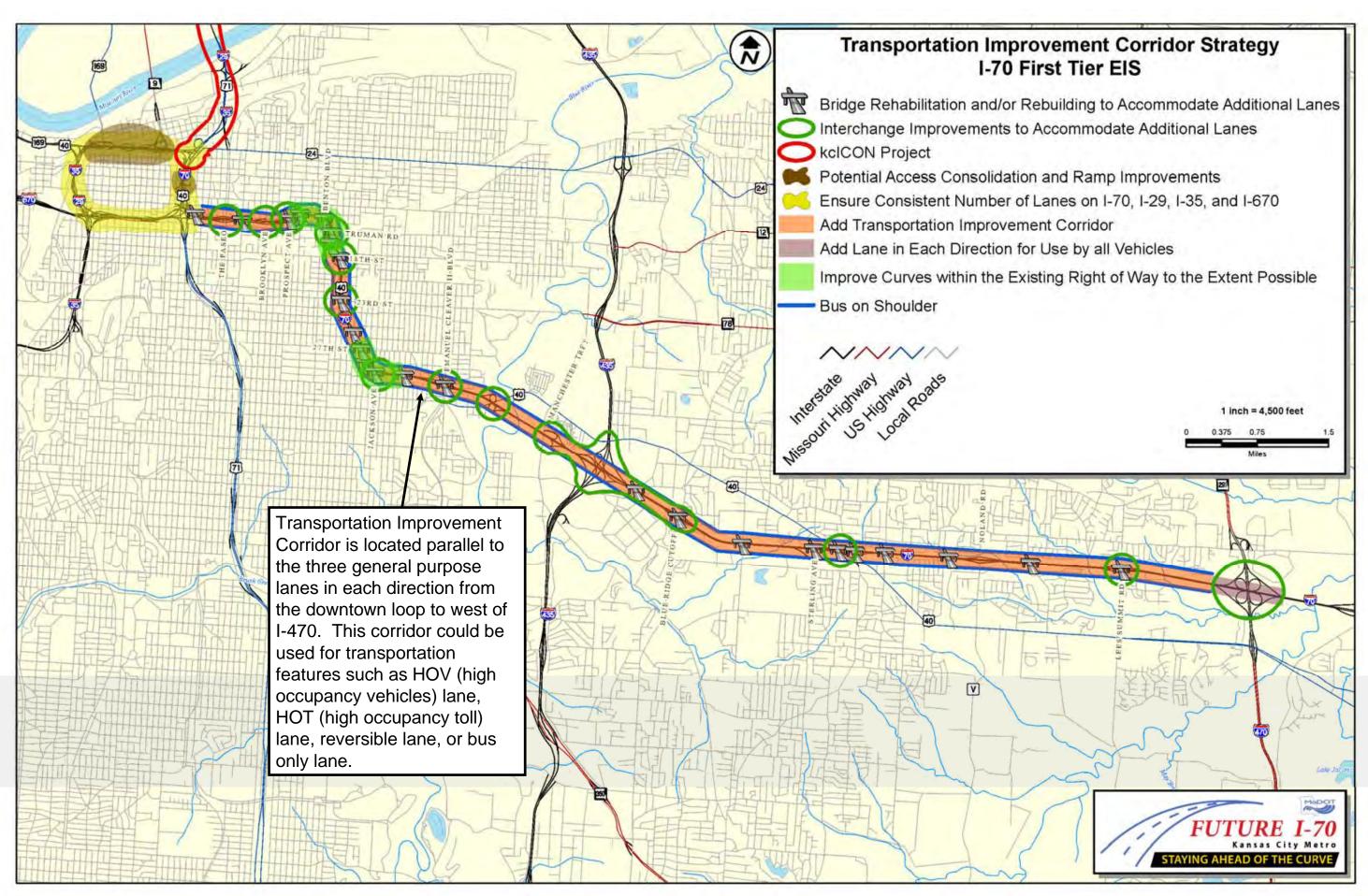


Draft EIS - Alternatives Considered Figure 2.5 Add General Lanes Strategy - Jackson Avenue to U.S. 40 east



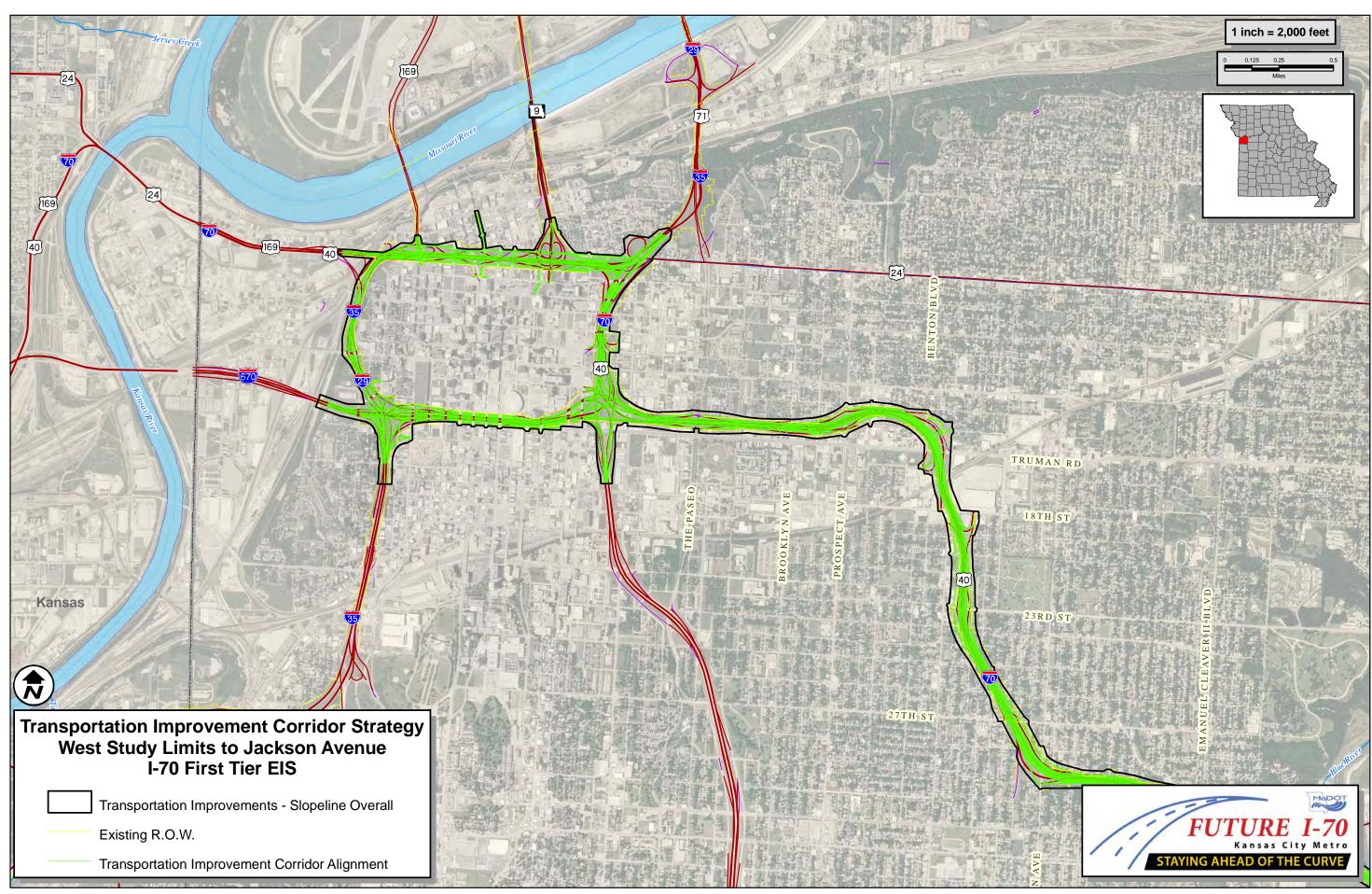
Draft EIS - Alternatives Considered

Figure 2.5 Add General Lanes Strategy - U.S. 40 east to East Study Limits



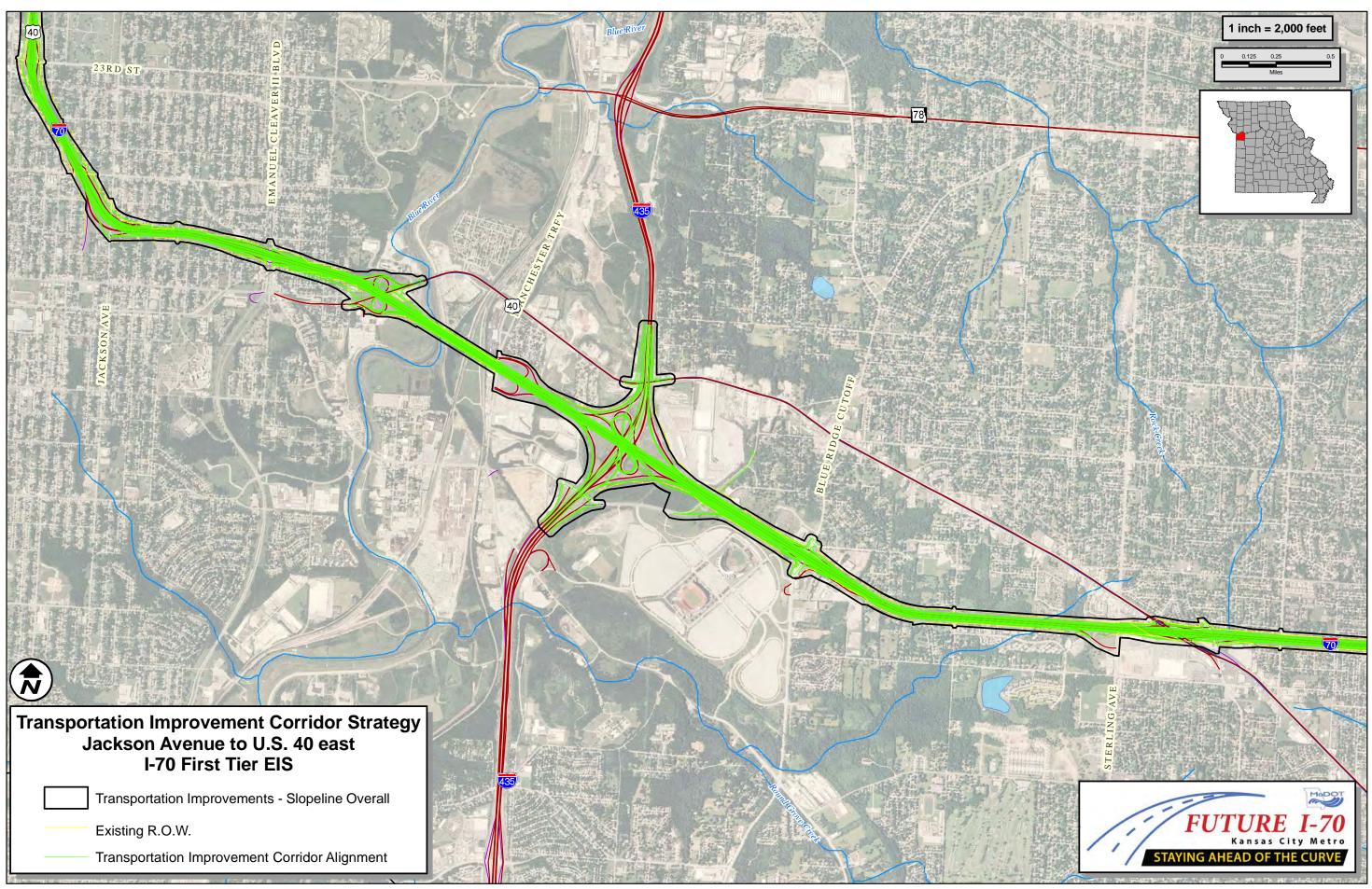
Draft EIS - Alternatives Considered

Figure 2.6 Transportation Improvement Corridor Strategy



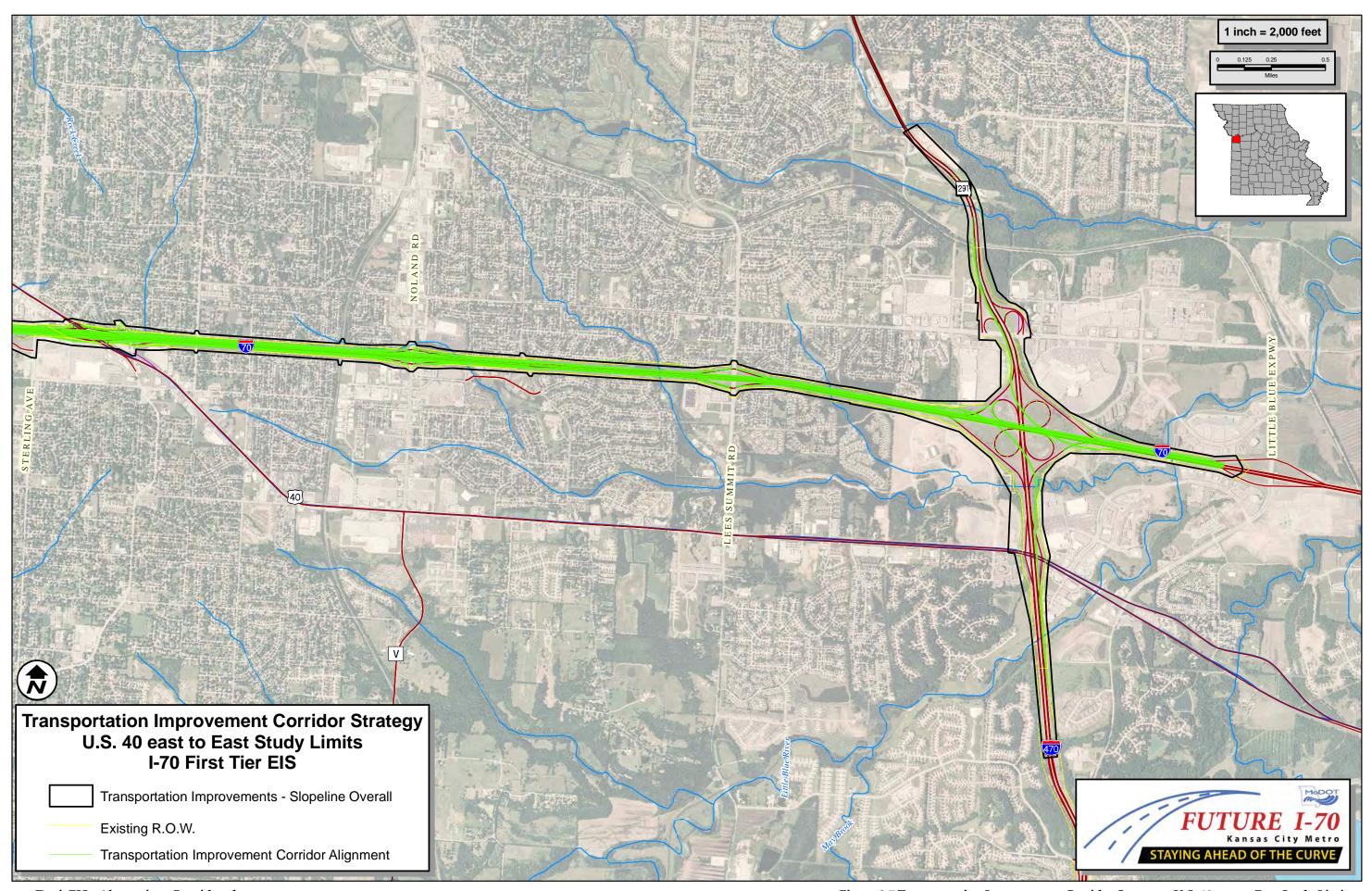
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Figure 2.7 Transportation Improvement Corridor Strategy - West Study Limits to Jackson Avenue



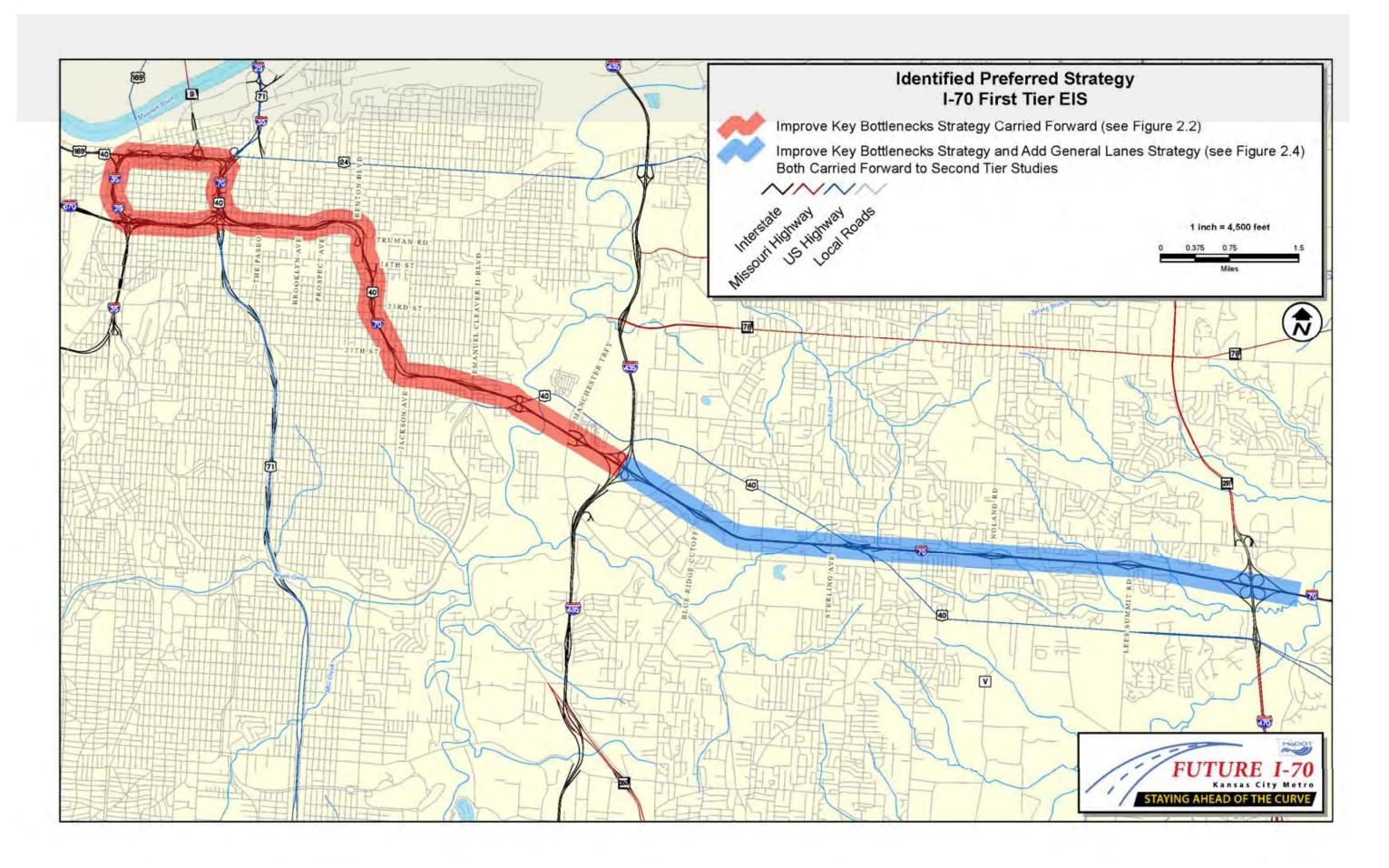
Draft EIS - Alternatives Considered

Figure 2.7 Transportation Improvement Corridor Strategy - Jackson Avenue to U.S. 40 east



Draft EIS - Alternatives Considered

Figure 2.7 Transportation Improvement Corridor Strategy - U.S. 40 east to East Study Limits



Draft EIS - Alternatives Considered

Figure 2.9 Identified Preferred Strategy

Affected Environment and Environmental Consequences

This chapter discusses the effects of the Strategy Packages on the human and natural environment. Effects are discussed for the No-Build Strategy, Improve Key Bottlenecks Strategy, Add General Lanes Strategy, Transportation Improvement Corridor Strategy, and Identified Preferred Strategy. Figures of these alternatives are located at the end of **Chapter 2**.

The chapter includes a discussion of effects under 23 categories in subsections. For each category, background information is provided on the affected environment, describing existing conditions in the Study Area. For categories where the strategies have a negligible impact, the discussion of resources and affects are brief. For more substantial impacts, the subsections contain a more detailed impacts analysis. Where the potential effects of the strategies vary substantially by location within the Study Area, they are discussed in five study area Sub-Areas.

- <u>Downtown Sub-Area:</u> The FTEIS Study Area west of Tracy Avenue
- <u>Suburban Sub-Area:</u> Tracy Avenue to Topping Avenue
- <u>I-435 Sub-Area:</u> Topping Avenue to east of Blue Ridge Cutoff
- <u>Suburban Sub-Area:</u> East of Blue Ridge Cutoff to east of Lee's Summit Road
- <u>I-470 Sub-Area:</u> East of Lee's Summit Road to the eastern limits of the Study Area

Figure 3.0 at the end of this chapter shows the Sub-Areas used for the impact analysis.

The potential for indirect and cumulative impacts to resources is discussed in **Section 3.19**.

When applicable, mitigation measures to avoid, minimize, or mitigate harm to environmental resources are also discussed

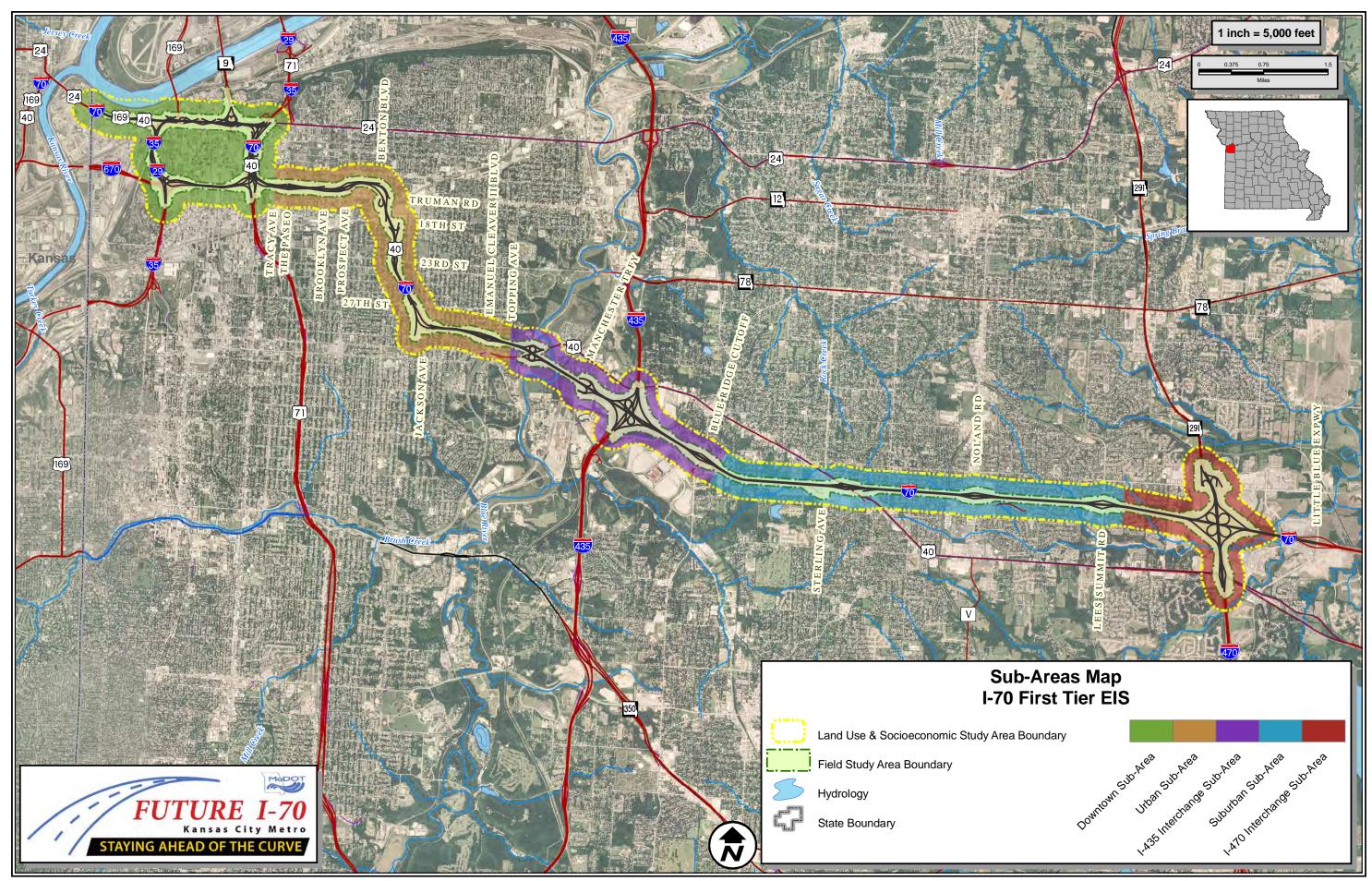
What does Mitigation mean?

Mitigation is defined as the elimination, reduction, or control of the negative environmental effects of a project, and includes measures to address any damage to the environment caused by such effects through replacement, restoration, compensation, or any other means.

What are Second Tier studies?

Tiering allows projects to conduct the planning and NEPA activities for large transportation projects in two phases: a first tier study addresses broad, overall corridor issues, and a second tier focuses on site-specific impacts, costs, and mitigation measures. Second Tier studies result in traditional project level environmental documents.

by Sub-Area. Most of the detailed discussion of mitigation measures will occur as part of the Second Tier studies, when further engineering design detail is developed for the selected strategy. For each category of impact, a brief discussion of how the analysis will proceed as the study moves to Second Tier studies is included.



Draft EIS - Affected Environment and Environmental Consequences

3.1 Land Use and Zoning

This section discusses the effect the proposed strategies will have on land use and zoning in the Study Area.

Where is the I-70 FTEIS Study Area?

The I-70 FTEIS Study Area extends from the Missouri-Kansas state line to east of I-470, a distance of approximately 18 miles including the entire downtown loop. The Study Area follows I-70 through the City of Independence, Missouri and several Kansas City, Missouri designated neighborhood areas including the Central Industrial District, River Market, Columbus Park, Downtown, Westside, Crossroads District, Garfield-Independence Plaza, Downtown East, Santa Fe, Budd Park, East 23rd Street, Blue Valley Industrial, and Sports Complex Area. The land use Study Area includes all land uses within approximately 1,000 feet of the I-70 highway centerline.

What is the Existing Land Use and Zoning in the Study Area?

The following section is a summary of the existing land uses and zoning within the I-70 FTEIS Study Area by neighborhood area. All of the neighborhood and community areas and the respective land uses are shown in **Figure 3.1.1** at the end of this chapter.



Central Industrial District

Central Industrial District

The Central Industrial District, commonly known as the west bottoms, is located west of Downtown Kansas City. It is bound by the Missouri River on the north, the Missouri-Kansas state line on the west, 27th Street on the south, and the bluffs on the east. The area is primarily industrial with some commercial. Both light and heavy industrial land use exist within the Central Industrial District portion of the I-70 Study Area.

What is Light Industrial?

Light industrial is the production of goods that are consumer oriented and produced for the end user.

What are commercial land uses?

Commercial land uses allow the sale of goods and/or services. Stores and restaurants are examples.



Historic City Market

What are multi-family residential land uses?

Multi-family land uses allow for buildings that house two or more separate living quarters. Apartment buildings, townhomes, and duplexes are examples of multi-family residential uses.

What is meant by mixed use?

Mixed Use is the combination of residential, commercial, industrial, office, institutional, or other land uses in a single building or set of buildings.

River Market

The River Market is located just north of downtown Kansas City. It is bound by the Missouri River on the north, Bluff Drive on the west, I-70/I-35 on the south, and the Heart of America Bridge on the east. The area is primarily commercial and multi-family residential. The River Market portion of the I-70 Study Area contains the following existing land use categories:

- Commercial
- Multi-family residential
- Mixed use (typically zoned commercial)
- Parks and open space
- Public/semi-public

Within the Study Area, the most prevalent land use is commercial and multi-family residential or apartments and condominiums. The commercial uses include restaurants, bars, taverns, retail shops, and legal offices. Also located within the River Market is the historic City Market. The City Market includes retail shops, restaurants, a grocery store, the Arabia Steamboat Museum, and on Saturdays a farmers market.

The mixed use land use is represented by numerous structures with retail and/or office on the ground level and apartments or condominiums on the upper levels. A fire station is also located in this part of the Study Area.

Columbus Park

Columbus Park is bound by the Missouri River on the north, the Heart of America Bridge on the west, I-70/I-35 on the south, and I-29/I-35 on the east. This area is primarily residential. The Columbus Park portion of the I-70 Study Area contains the following existing land use categories:

- Single-family residential
- Multi-family residential
- Commercial
- Parks and open space
- Public/semi-public

Within the Study Area, the most prevalent land use is multi-family and single-family residences. There are some commercial uses located on Charlotte Street and 5th Street. Columbus Square Park is located in this area. The Study Area also contains numerous public/semi-public uses which include the Don Bosco Senior Center, Full Faith City Church, and Holy Rosary Church.

Downtown

Downtown Kansas City, MO is the central business district for the city. It is bound by I-70/I-35 on the north, I-35 on the west, I-670 on the south, and I-70 on the east. All of the Downtown is within the I-70 Study Area. The Downtown contains the following existing land use categories:

- Commercial
- Multi-family residential
- Industrial
- Government
- Public/semi-public
- Parks and open space

This area is primarily high rise, high-density commercial buildings with an increasing number of multi-family residential units, consisting of high rise apartments and condominiums. The dominant commercial land uses are retail, office, wholesale, restaurants, and other commercial activities catering to the working downtown population. Several companies' headquarters are in Downtown including law firms, insurance companies, and business and office suppliers. In recent years several office buildings and older industrial buildings have been converted to high rise multi-family residential units.

Some industrial uses remain in the southern portion of the Downtown. The government buildings in downtown include the City of Kansas City, MO City Hall, Federal Courthouse, and Jackson County Courthouse. Also in the Downtown are the Kansas City, MO Police Department and several other public/semi-public uses including several churches and community facilities like the Bartle Hall Convention Center.



New Multi-family Residential in Columbus Park



Quality Hill Condominums located at 10th Street and Pennsylvania Avenue

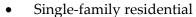
What is meant by public/semi-public land uses?

A public space is open and available to all citizens. Semi-public space has some stricter rules attached such as dress codes, advertising limits, entrance fee, or skateboards limitations to name a few. There are also six parks in the downtown area: River Bluff Park, Ermine Case Jr. Park, Barney Allis Plaza, Oppenstein Brothers Memorial Park, Ilus W. Davis Park, and Admiral Park.

A development project that includes the headquarters of J. E. Dunn Construction Company, a major federal government office complex, and multi-family residential units is planned for the northeastern portion of the Downtown. The historical Garment District is located in the western portion of the Downtown.

Westside

The Westside is bound by I-35 and I-670 on the north, the bluffs and railroad tracks on the west, 31st Street on the south, and Broadway Boulevard and Southwest Trafficway on the east. This area is primarily residential. The Westside portion of the I-70 Study Area contains the following existing land use categories:



- Multi-family residential
- Industrial
- Public/semi-public
- Parks and open space

The Westside portion of the Study Area is comprised of major strips of commercial activity on Broadway Boulevard and pockets of industrial uses. In addition, there is some multi-family and single-family residential on the west side of Broadway Boulevard. The public/semi-public uses include the Mattie Rhodes Center and the New Life on the Westside Non-Profit Youth Center. The parks include Mulkey Square, Jarboe Park, and Andrew Drips Park.

Crossroads District

The Crossroads District is bound by I-670 on the north, Broadway Boulevard and Southwest Trafficway on the west, Pershing Road on the south, and U.S. 71 on the east. The Crossroads District is characterized as an area attractive to upscale restaurants and shops, and artists. The Crossroads



Multi-family Residential in the Westside

District portion of the I-70 Study Area contains the following existing land use categories:

- Commercial
- Multi-family residential
- Public/semi-public
- Government

Within the Study Area, the most prevalent land use is commercial which includes retail stores, restaurants, bars, and car dealerships. Recent developments in the area include multi-family residential consisting of condominiums and apartments. The public/semi-public uses include a police station, fire station, Hope Faith Ministries, Jewish Vocational Service, and Plaza de Niños Preschool. A government use is the Kansas City Correctional Center.

Garfield-Independence Plaza

The Garfield-Independence Plaza area is east of downtown and is bound by Cliff Drive on the north, I-29/I-35 on the west, I-70 on the south, and Prospect Avenue and Chestnut Avenue on the east. This area is characterized by several different land residential, uses including multi-family industrial, single-family residential and commercial. Garfield-Independence Plaza area was once the location of an urban renewal district consisting of several high rise public housing units. These units were demolished in favor of the more-pleasant lower density residential units that are found interspersed throughout this area currently. The Garfield-Independence Plaza Area of the I-70 Study Area contains the following existing land use categories:

- Commercial
- Industrial
- Single-family residential
- Multi-family residential
- Mixed use (typically zoned commercial)
- Public/semi-public
- Parks and open space
- Government



Leedy-Voulkos Art Center in the Crossroads District



Margaret Kemp Park

There are newer multi-family units just north of I-70 and Prospect Plaza Park, beginning at 11th Street and basically covering the entire Prospect Avenue to Paseo Boulevard corridor. There is industrial, multi-family and single-family residential from Prospect Avenue and 13th Street to Prospect Plaza Park and 12th Street; then again those same uses are interspersed from 11th Street and Prospect Avenue to 9th Street and in other areas north of 11th Street. There are mixed uses of multi-family residential and commercial along Independence Avenue between Paseo Boulevard and Chestnut Avenue. Between Paseo Boulevard and Troost Avenue there are several multi-family units.

On the west side of the area beginning at Troost Avenue at I-70 there are industrial uses. The Greyhound Bus Terminal is located at 12th Street and Troost Avenue. The City Union Mission is located at the intersection of 10th Street and Troost Avenue.

There are two parks located in the Study Area; Margaret Kemp Park and Prospect Plaza Park. A government use in this area is a post office.



18th and Vine Streets Historic District

Downtown East

The Downtown East area is bound by I-70 on the north, Troost Avenue on the west, 23rd Street on the south, and I-70 on the east. Within the area are generally mixed land uses including residential and the 18th and Vine Streets Historic District. The Downtown East area portion of the I-70 Study Area contains the following existing land use categories:

- Multi-family residential
- Single-family residential
- Industrial
- Commercial
- Parks and open space
- Public/semi-public

Within the Study Area, there is multi-family residential consisting of high rise apartments and public housing units mostly centered in and around Paseo Boulevard and a few blocks to the east to Brooklyn Avenue. There are industrial

and commercial uses in the western portion of the area. Several parks are also found in this area including Parade Park, The Grove, and Montgall Park. There are several churches in the area particularly on Paseo Boulevard, including St. Stephens Baptist Church and St. Monica's Catholic Church.

There are commercial and industrial uses centered near the intersection of Prospect Avenue and Truman Road. Additional industrial along with single and multi-family residential is located from 23rd Street to 19th Street near Montgall Park.

Santa Fe

The Santa Fe area is located southeast of downtown Kansas City, MO. It is bound by 23rd Street on the north, Troost Avenue on the west, 31st Street on the south, and I-70 on the east. This area is primarily residential although a variety of land use categories exist within the Santa Fe portion of the I-70 Study Area. They include:

- Single-family residential
- Multi-family residential
- Commercial
- Industrial
- Public/semi-public
- Parks and open space
- Vacant land

Within the Study Area, the most prevalent land use is single family residential. A mobile home park located near the 31st Street/I-70 interchange represents a multi-family land use. Commercial land use is represented by many retail stores, businesses, restaurants, and auto dealerships and is found mainly along arterial roads and near highway interchanges.

The Study Area also contains many public/semi-public structures which include churches, the Faith Worship Family Center, and the Meyer Nursing & Convalescence Center. Two private corporations make up the industrial land use; Brown Industries and Super Metal Treating & Equipment. There are two parks; Cypress Park and Indiana Park within the Study Area. The area does contain a few vacant properties near I-70.



Make shift store at abandoned gas station near I-70 and Van Brunt Boulevard.

Budd Park

The Budd Park area is located east of downtown Kansas City, MO. It is bound by the Missouri Pacific Railroad on the north, Prospect Avenue south of Independence Avenue and Chestnut Avenue north of Independence Avenue on the west, Kansas City Terminal Railroad on the south, and Belmont Boulevard on the east. This area serves as both a residential and industrial area. A small portion of the I-70 Study Area is found only in the extreme southwest corner of the Budd Park area. The Budd Park portion of the I-70 Study Area contains the following existing land use categories:

- Single-family residential
- Multi-family residential
- Commercial
- Industrial
- Public/semi-public
- Vacant land

Within the Study Area, the most prevalent land use is single-family residential. Multi-family residential land use is represented by several apartment buildings located along 12th Street. Commercial land use is comprised of retail stores, businesses, bars, and an auto dealership spread throughout the area as well as several public/semi-public structures (churches). In addition, the area contains industrial land uses and several vacant properties, mainly along 12th Street.

East 23rd Street

The East 23rd Street area is located southeast of downtown Kansas City, MO. This area is bound by the Kansas City Terminal Railroad on the north, I-70 on the west and south, and Topping Avenue on the east. The East 23rd Street portion of the I-70 Study area contains the following existing land use categories:

- Single-family residential
- Commercial
- Industrial
- Public/semi-public



Single-family Residential in the Budd Park Area



Sign designating the East 23rd Street Neighborhood

- Government
- Vacant land

Within the Study Area, the 23rd Street area contains mostly single-family residential, including several Habitat for Humanity homes near the Jackson Avenue/I-70 interchange. Commercial uses include retail stores, businesses, and day cares and there are a few private industrial corporations throughout the area. There are also several public/semi-public structures including many churches and the Mt. St. Mary Catholic Cemetery. A United States Postal Service complex represents the only government use. There are small amounts of vacant parcels near I-70.



U.S. Postal Service Complex at 18th Street and Indiana Avenue

Blue Valley Industrial

The Blue Valley Industrial area is located north of I-70 and adjacent to (west of) I-435 in Kansas City, MO. It is bound by the Kansas City Terminal Railroad on the north, Topping Avenue on the west, I-70 on the south, and I-435 on the east. This area is primarily residential as well as heavy industrial. The Blue Valley Industrial area portion of the I-70 Study Area contains the following existing land use categories:

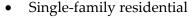
- Single-family residential
- Commercial
- Industrial
- Heavy industrial
- Public/semi-public
- Park
- Government
- Vacant land

Within the Study Area, the most prevalent land uses are light and heavy industrial, mainly near the U.S. 40/I-70 interchange. There is a single-family residential area near Topping Avenue and 29th Street, and two mobile home parks along U.S. 40. Additionally, there are several commercial uses represented by hotels/motels, an auto dealership, and private businesses located throughout the Study Area and a single public/semi-public use, the Glendale Baptist Church. The Kansas City Police Department K-9 training facility is located off of U.S. 40 and a portion of Blue Valley Park crosses into the

Study Area near Topping Avenue. There is also a moderate amount of vacant land that borders I-70.

Sports Complex

The Sports Complex area is bound by 23rd Street on the north, I-435 on the west, 67th Street on the south, U.S. 40 and the City of Independence, MO on the east. It is home to the Truman Sports Complex which houses Kauffman Stadium and Arrowhead Stadium. The Sports Complex area portion of the I-70 Study Area contains a mix of existing land uses including:



- Multi-family residential
- Commercial
- Industrial
- Public/semi-public
- Utilities

Within the Study Area, the most prevalent land use is single-family residential. The next most prevalent land use is commercial represented by numerous retail stores, businesses, gas stations, banks, auto dealerships, a drive-in movie theater, cafes and restaurants, and several motels/hotels, most of which are located near the sporting venues and the U.S. 40/I-70 interchange. Also near the U.S. 40/I-70 interchange are apartment complexes.

This part of the Study Area also contains public/semi-public uses including churches, the sports stadiums, and a Missouri Welcome Center. Also in the Study Area are several public/semi-public uses including grade schools, Vatterott College, and the Berean Christian Academy. The area also contains a utility power station and a cellular phone tower.

City of Independence

The City of Independence, MO is located just east of Kansas City, MO. It includes a portion of the I-70 Study Area from roughly U.S. 40/Chrysler Avenue east to the Little Blue Parkway/I-70 interchange.



Arrowhead Stadium

A majority of the Independence's existing land use in the Study Area is single-family residential. But it also contains many other land uses including, but not limited to, multi-family residential, commercial, parks and open space, and agricultural. Independence's portion of the I-70 Study Area contains a smaller mix of existing land use categories including:

- Single-family residential
- Multi-family residential
- Commercial
- Public/semi-public
- Government
- Parks and open space

Several apartment complexes represent the multi-family residential land use and are found near the I-470/I-70 and U.S. 40/I-70 interchanges. Commercial uses include numerous retail stores and businesses, shopping centers, gas stations, cafes and restaurants, auto dealerships, motels/hotels, and banks. Larger and more common commercial uses include Costco, Wal-Mart, Sam's Club, The Home Depot, K-Mart, and the Independence Center Shopping Mall.

Additionally, this portion of the Study Area also contains a large assortment of office buildings, especially near the Noland Road/I-70 interchange. There are a few public/semi-public uses; churches, and William Southern Elementary School. A government use is the Social Security Administration building. This part of the Study Area contains three parks; Joseph Adair Park, Waterfall Park, and Carriage Hills Park.

How Will MARC's Transportation Outlook 2040 Plan Affect Land Use and Zoning in the Study Area?

MARC's Long Range Transportation Plan (LRTP) is being updated and scheduled to be adopted in the Summer of 2010. The LRTP update is presenting two land use scenarios – a Baseline Scenario and an Adaptive Scenario.

The Baseline Scenario is the continuation of the existing land use trends throughout the region. This scenario shows a



Costco near the I-70/I-470 Interchange

decline in the urban core, surrounded by limited redevelopment, and widespread, scattered new development. Redevelopment occurs, but consists of replacing old structures with the same land use.

The Adaptive Scenario is based on dense infill development

closer to the downtown area while adapting to climate change

issues, higher gasoline and electricity prices, less consumption, demographic shifts, and changing technology. This could be

similar to the outcome of implementing policy goals in

Transportation Outlook 2040.

What is Infill Development?

Infill development is the process of the developing vacant or under used land within the existing urban area.

The actual land use scenario used in the LRTP update could be one of these scenarios or a scenario with some features of both.

How Will the Greater Downtown Area Plan Affect Land Use and Zoning in the Study Area?

The Greater Downtown Area Plan is still in draft form at this time. This plan aims to concentrate the highest density and scale of development within the Downtown Loop and the Crown Center/Hospital Hill districts. This plan will encourage compact, mixed use development. In addition, the plan will strive to connect the Downtown Loop and the Crown Center/Hospital Hill districts with a dense transit corridor utilizing Transit Oriented Development generally along Grand Avenue/Main Street

What is Transit Oriented Development?

Transit oriented development (TOD) is a mixed-use area designed to maximize opportunities to use public transit.

How Will the Strategies Affect Land Use and Zoning in the Study Area?

The strategies affects on land use would mostly have to do with noise from the freeway, relocations of homes and businesses, and changes in access, particularly to businesses. Each of these issues is discussed in detail in other parts of Chapter 3. The basic compatibility of the strategies with existing land use and zoning is discussed in the paragraphs below.

No-Build Strategy

The No-Build Strategy would be consistent with local planning in the cities of Kansas City and Independence, MO.

This strategy would have no affect on the existing land use and zoning. The No-Build Strategy is less consistent with MARC's baseline land use scenario and more consistent with MARC's adaptive land use scenario and with the draft downtown area plan. With no capacity additions or substantial improvements to I-70, high congestion may discourage commuting from outside the urban area. However, congestion may also discourage some of the economic development/redevelopment proposed by these plans as it would be harder for people and goods to access central Kansas City.

Improve Key Bottlenecks Strategy

The current and planned zoning and land uses in the Study Area are relatively consistent with the Improve Key Bottlenecks Strategy. This strategy will have minimal affect on the existing land use and zoning and aims to make improvements within the existing right of way to the extent possible. However, the need for right of way may be required in areas near existing bottlenecks. These areas include the Benton Curve, the Jackson Curve, the I-435 interchange, the I-470 interchange, and interchange ramps throughout the Study Area. **Section 3.4 Relocations** discusses the impacts to commercial, residential, and other facilities more specifically.

The Improve Key Bottlenecks Strategy is more compatible with MARC's adaptive land use scenario and with the draft downtown area plan and less compatible with MARC's baseline land use scenario. The Improve Key Bottlenecks Strategy does not add capacity throughout the corridor, thus supporting greater use of existing developed areas and reducing incentive to commute from outside the urban area. It adequately addresses traffic needs from I-435 to downtown. It minimizes the need to acquire developed land in the core of the city of Kansas City compared to the other Build Strategies.

Add General Lanes Strategy

The Add General Lanes Strategy is not consistent with current and planned zoning and land uses in the Study Area. This strategy will affect commercial, residential, and other facilities with the expansion of I-70 to eight lanes, four lanes in each direction. As the improvements recommended as a part of the Add General Lanes Strategy are wide spread throughout the Study Area, its impacts to land use and zoning are as well. More specific impacts are discussed in **Section 3.4 Relocations**.

The Add General Lanes Strategy is more consistent with MARC's baseline land use scenario and less consistent with MARC's adaptive land use scenario and the draft downtown area plan. The additional capacity may continue to encourage residents to live outside the core of the city as additional lanes will facilitate increased commuting to downtown.

<u>Transportation Improvement Corridor Strategy</u>

The Transportation Improvement Corridor Strategy is not consistent with current and planned zoning and land uses in the Study Area. This strategy will affect commercial, residential, and other facilities with the expansion of I-70 to include a Transportation Improvement Corridor. As the improvements recommended as a part of the strategy are wide spread throughout the Study Area, its impacts to land use and zoning are as well. More specific impacts are discussed in **Section 3.4 Relocations**.

The Transportation Improvement Corridor Strategy is more consistent with MARC's baseline land use scenario and less consistent with MARC's adaptive land use scenario or with the draft downtown area plan. The additional capacity may continue to encourage residents to live outside the core of the city as additional lanes will facilitate increased commuting to downtown.

<u>Identified Preferred Strategy</u>

The current and planned zoning and land uses in the Study Area are relatively consistent with the Identified Preferred Strategy west of I-435. This strategy will have minimal affect on the existing land use and zoning and aims to make improvements within the existing right of way to the extent possible. However, the need for right of way may be required in areas near existing bottlenecks. These areas may include

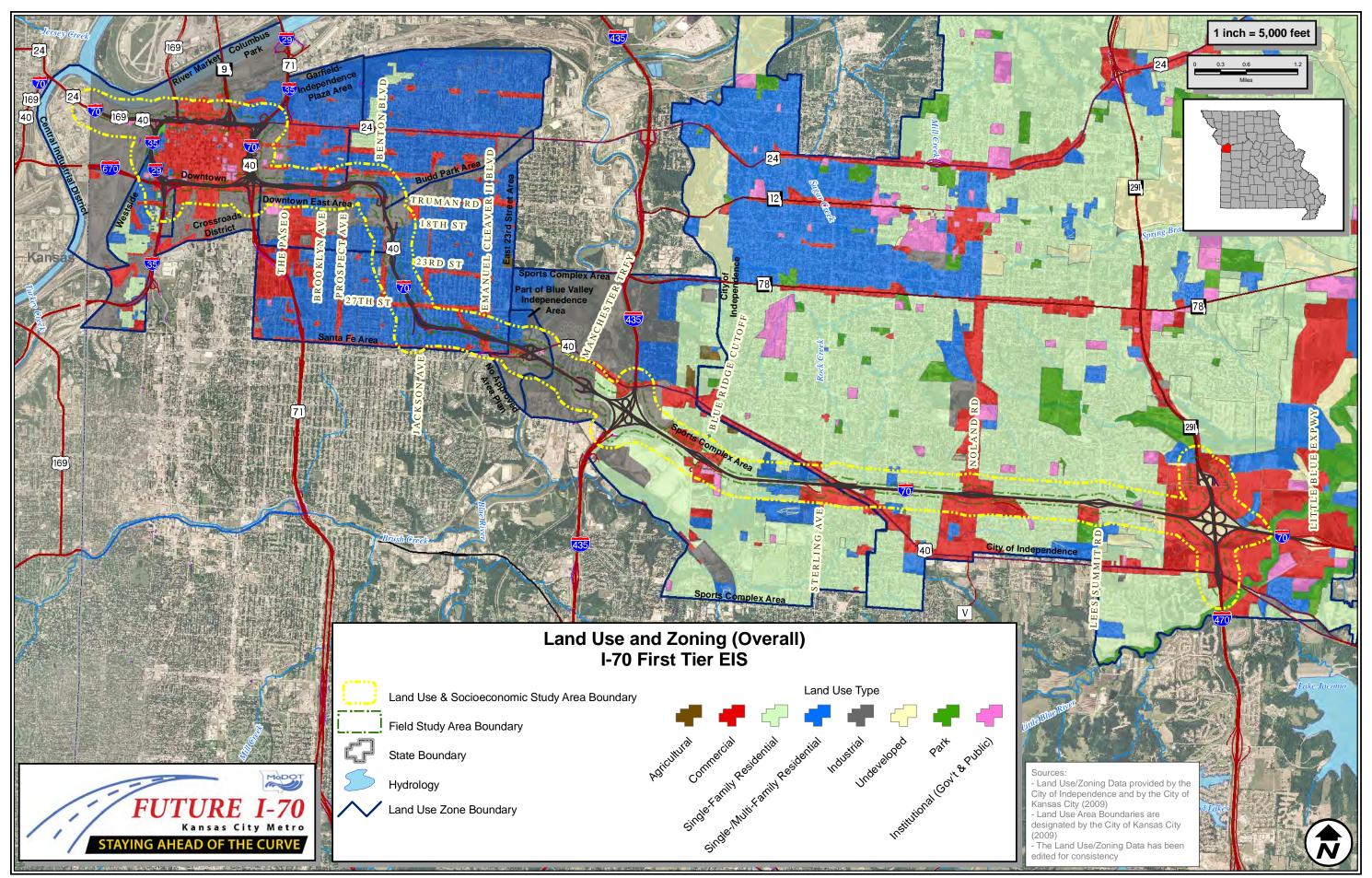
the Benton curve, the Jackson curve, the I-435 interchange, and interchange ramps throughout the Study Area.

The Identified Preferred Strategy effects on land use are dependant on the improvements selected in the Second Tier studies.

East of I-435, the wider footprint (Add General Lanes Strategy) is less consistent with current and planned zoning and land uses in the Study Area east of I-435 than the Improve Key Bottlenecks Strategy. The Identified Preferred Strategy will affect commercial, residential, and other facilities differently depending on which strategy is selected in the Second Tier studies. **Section 3.4 Relocations** discusses the impacts to commercial, residential, and other facilities more specifically. The Improve Key Bottlenecks Strategy is more compatible with MARC's adaptive land use scenario and with the draft downtown area plan, while the Add General Lanes Strategy is more compatible with MARC's baseline land use scenario.

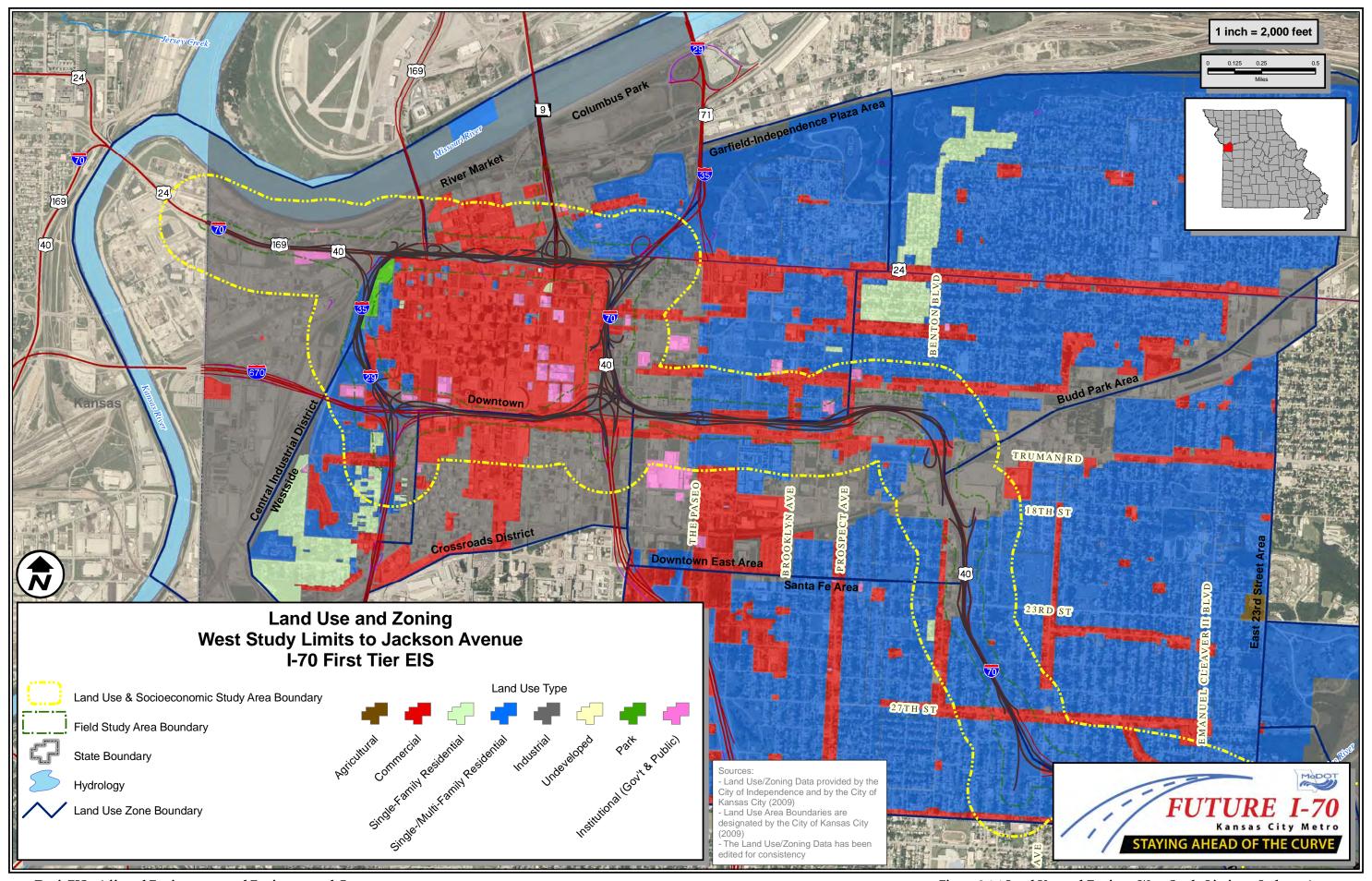
How Will The Analysis of Land Use Impacts Be Refined in the Second Tier Strategies?

The next step in the environmental stage of this project is to conduct Second Tier studies which will further evaluate and refine the land use needs and impacts. The Second Tier studies will refine the Identified Preferred Strategy and its footprint to avoid or minimize the identified land use impacts where possible. At the time of the Second Tier studies, the MARC 2040 Long Range Transportation Plan and the Greater Downtown Area Plan should be complete allowing for greater analysis of the compatibility of strategies with the final results of these plans.



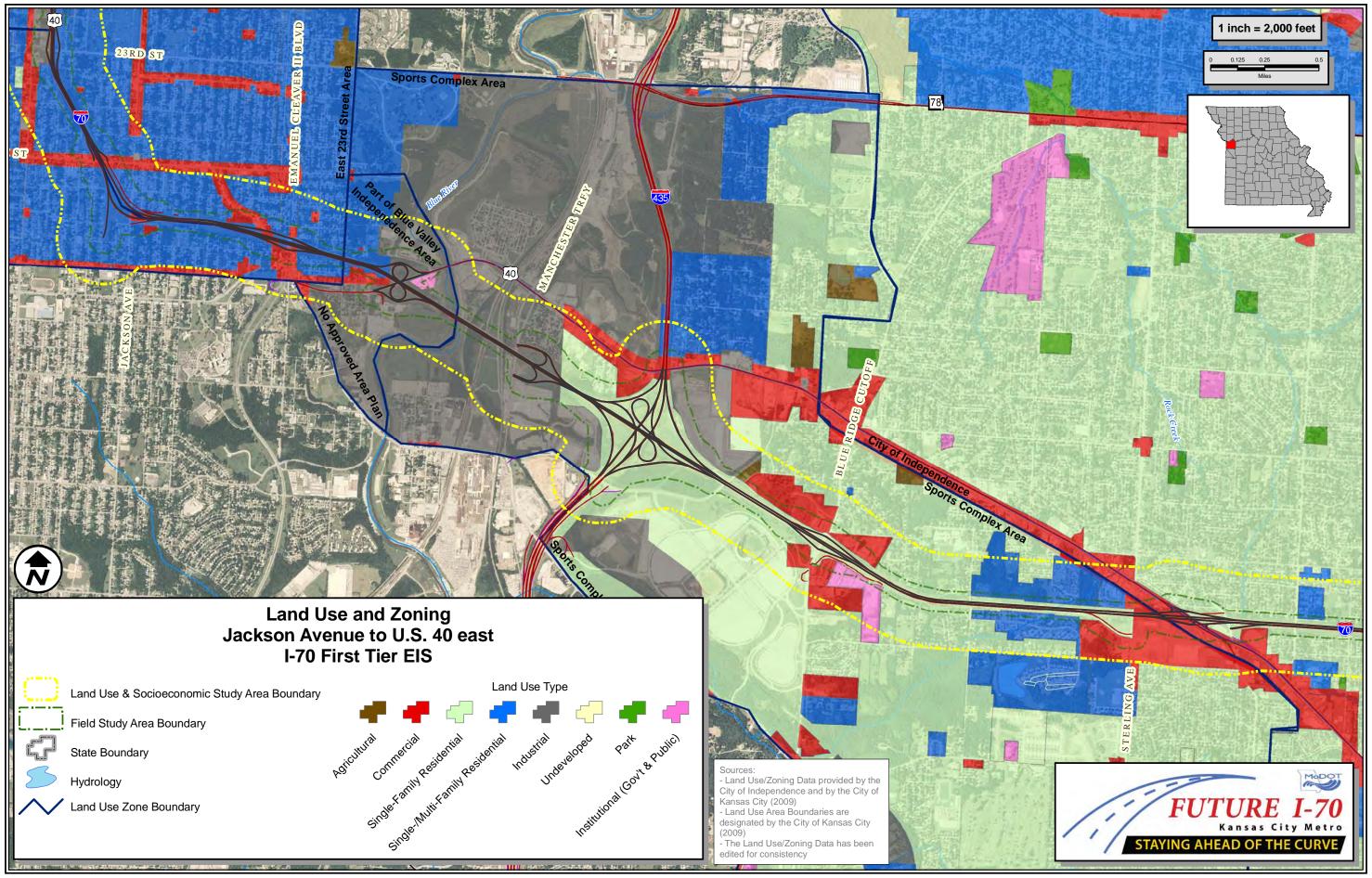
Draft EIS - Affected Environment and Environmental Consequences

Figure 3.1.1 Land Use and Zoning - Overall



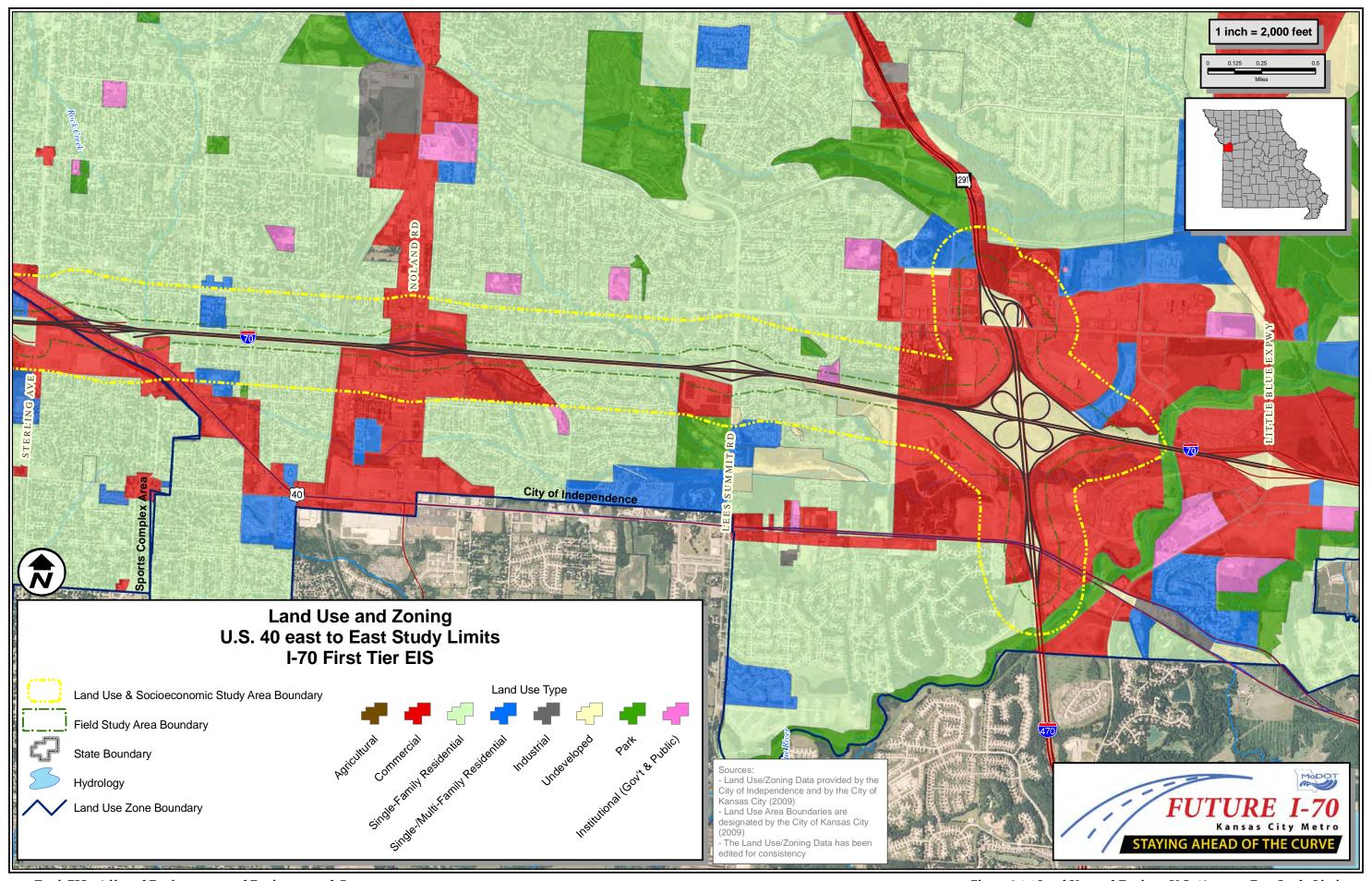
Draft EIS - Affected Environment and Environmental Consequences

Figure 3.1.1 Land Use and Zoning - West Study Limits to Jackson Avenue



Draft EIS - Affected Environment and Environmental Consequences

Figure 3.1.1 Land Use and Zoning - Jackson Avenue to U.S. 40 east



Draft EIS - Affected Environment and Environmental Consequences

Figure 3.1.1 Land Use and Zoning - U.S. 40 east to East Study Limits

3.2 Community and Neighborhood Effects

This section discusses how the strategies will affect the local residents, neighborhoods, and community facilities. The section begins by providing a brief profile of the Study Area and explains who lives in the various local neighborhoods, how they travel, and where schools and other community facilities are located. The last part of this section explains how the proposed I-70 strategies would affect neighborhood and community facilities.

How Was an Assessment of the Study Area Developed?

The Study Team used information from the U.S. Census Bureau to develop a profile of the residents in the I-70 Study Area. The Study Team analyzed population information for all 2000 Census Block Groups that either touch or are located entirely within the Study Area. The Study Team also analyzed 2000 Census Block Group data for the City of Independence, the City of Kansas City, Jackson County, and the State of Missouri. Information on race, age, gender, employment, income, education, and transportation is displayed in the charts and tables that follow in this section.

Who Lives in the Study Area and Surrounding Jurisdictions?

Based on information obtained from the 2000 Census, the Study Team identified 64 Census Block Groups that either touch or are entirely within the I-70 Study Area. The 64 block groups include 57,590 residents. Of the total population, the two largest minority groups are African-Americans and Hispanics or Latinos. A detailed discussion on minority populations within the Study Area can be found in the Environmental Justice Section of the FTEIS (Section 3.5 Environmental Justice).

The Study Area has a slightly higher percentage of females (50.8%) to males (49.2%), but not as high compared to gender percentages found in the surrounding jurisdictions. The population of the Study Area is also slightly older than the overall populations of Kansas City, Jackson County, and the State of Missouri but is generally younger than the population

What is a Block Group?

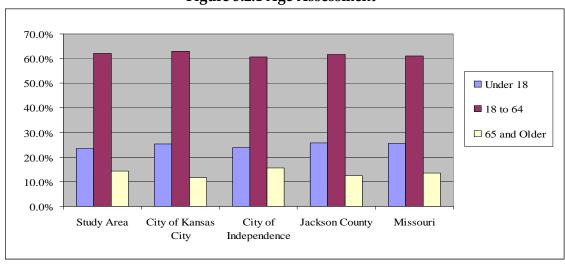
A block group is the smallest geographic unit for which the Census Bureau tabulates sample data. A block group consists of all the blocks within a census tract with the same beginning number. Example: block group 3 consists of all blocks within a 2000 census tract numbering from 3000 to 3999.

of Independence. In both cases the differences is less than five percent; however, it does indicate that there are more seniors in some of the potentially affected parts of the Study Area. **Table 3.2.1**, **Figure 3.2.1**, and **Figure 3.2.2** show the age and gender profiles for the Study Area and surrounding jurisdictions.

Table 3.2.1 Age and Gender Assessment

Tuble 5.2.1 Fige und Gender Fissessment						
Population Characteristics	Study Area	City of Kansas City	City of Independence	Jackson County	Missouri	
Total Persons	F7 F00	, 	-		F FOF 211	
Total Persons	57,590	441,269	113,207	654,880	5,595,211	
Under 18	23.4%	25.3%	23.8%	25.7%	25.5%	
18 to 64	62.1%	63.0%	60.7%	61.7%	61.0%	
65 and older	14.4%	11.7%	15.5%	12.5%	13.5%	
Male	49.2%	48.2%	47.6%	48.0%	48.6%	
Female	50.8%	51.8%	52.4%	52.0%	51.4%	
Source: U.S. Census Bureau, Census 2000. Study Area data is for the Census Block Groups.						

Figure 3.2.1 Age Assessment



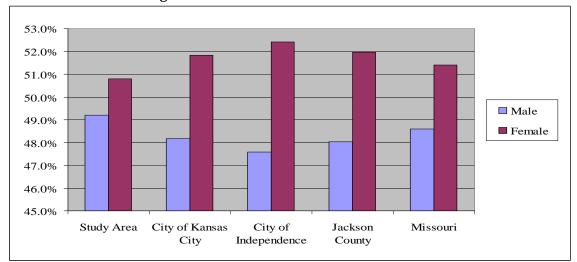


Figure 3.2.2 Gender Assessment

What are the Economic Characteristics of Study Area Residents?

The Study Team examined two ways of measuring income: median household and per capita. Median household income is essentially the income earned by the household for whom half of their neighbors make more money and half of their neighbors make less money. Per capita income is measured by adding all of the incomes reported for an area together and dividing by the number of people in that area.

Median household income and per capita income are generally lower for the Study Area than for the surrounding jurisdictions. As well, the percent of individuals below the poverty line is higher for the Study Area than the surrounding jurisdictions. People in poverty are those who live in households with incomes at or below the U.S. Department of Health and Human Services poverty guidelines.

Based on 2000 Census information, residents in the Study Area had a median household income of \$28,467 and a per capita income of \$16,567. Approximately 17.8 percent of the residents lived at or below the poverty level. **Table 3.2.2**, **Figure 3.2.3**, and **Figure 3.2.4** show the income levels and poverty status profiles for the Study Area and surrounding jurisdictions.

Table 3.2.2 Economic Characteristics Comparison

Income Levels and	Study Area	City of	City of	Jackson	Missouri
Distribution		Kansas City	Independence	County	
Median Household	\$28,476	\$37,198	\$38,012	\$39,277	\$37,934
Income					
Per Capita Income	\$16,567	\$20,753	\$19,384	\$20,788	\$19,936
Individuals Below	17.8%	14.3%	8.6%	11.9%	11.7%
Poverty Level					

Source: U.S. Census Bureau, Census 2000. Study Area data is for the Census Block Groups.

Figure 3.2.3 Income Levels

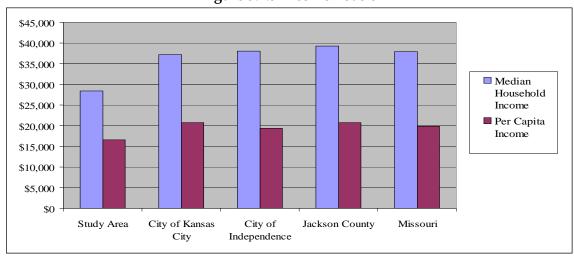
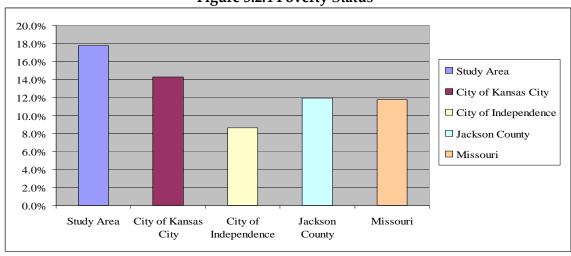


Figure 3.2.4 Poverty Status



What are the Education Levels of Residents in the Study Area?

The percent of residents who earned a high school diploma or higher (including equivalency) was lower in the Study Area compared to surrounding jurisdictions. According to the 2000 Census, 77.3 percent of residents in the Study Area earned a high school diploma or higher, compared to 82.4 percent in Kansas City, 82.9 percent in Independence, 83.3 percent in Jackson County, and 81.3 percent in all of Missouri. In addition, 17.2 percent of residents in the Study Area earned a bachelor's degree or higher, compared to 25.7 percent in Kansas City, 15.2 percent in Independence, 23.4 percent in Jackson County, and 21.6 percent in the State of Missouri. **Table 3.2.3** shows the education profile for the Study Area and surrounding jurisdictions.

Table 3.2.3 Education Levels

Education Levels	Study Area	City of Kansas	City of	Jackson	Missouri	
		City	Independence	County		
Population 25 years	38,423	287,046	76,559	427,077	3,634,906	
and older						
Less than 9th grade	6.3%	4.7%	4.4%	4.4%	6.5%	
9th to 12th grade, no	16.3%	12.9%	12.7%	12.2%	12.1%	
diploma						
High school graduate	32.2%	27.8%	38.5%	30.0%	32.7%	
or GED						
Some college, no	28.0%	28.9%	29.2%	29.9%	27.0%	
degree						
Bachelor's degree	11.7%	17.0%	10.1%	15.5%	14.0%	
Master's degree	3.9%	5.9%	3.9%	5.5%	5.2%	
Professional school	1.5%	2.8%	1.2%	2.4%	2.4%	
degree or PhD						
Percent high school	77.3%	82.4%	82.9%	83.3%	81.3%	
graduate or higher						
Percent Bachelor's	17.2%	25.7%	15.2%	23.4%	21.6%	
degree or higher						
Source: U.S. Census Bureau, Census 2000. Study Area data is for the Census Block Groups.						

I-70 First Tier Draft EIS Community and Neighborhood Effects

What are the Employment Characteristics of the Study Area?

What is the Labor Force?

The Labor Force consists of all people 16 and over who are working or are actively looking for work. The Study Area has fewer residents age 16 years and over in the labor force compared the Kansas City and Independence, Jackson County, and the State of Missouri. However, more of those in the labor force within the Study Area are unemployed then in the surrounding jurisdictions. **Table 3.2.4** and **Figure 3.2.5** show the employment status profiles for the Study Area and surrounding jurisdictions as Census 2000.

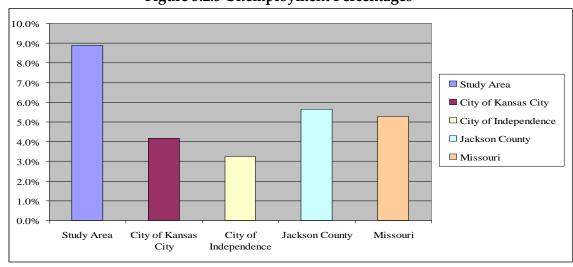
Section 3.6 Economics has updated information on regional unemployment.

Table 3.2.4 Employment

Employment Status	Study Area	City of Kansas	City of	Jackson	Missouri	
		City	Independence	County		
Population 16 years and over	45,477	340,707	89,279	504,285	4,331,369	
In the labor force	60.5%	66.5%	65.4%	66.5%	65.2%	
Not in the labor force	39.5%	33.5%	34.6%	33.5%	34.8%	
Unemployed Persons	8.9%	4.2%	3.2%	5.7%	5.3%	

Source: U.S. Census Bureau, Census 2000. Study Area data is for the Census Block Groups.

Figure 3.2.5 Unemployment Percentages



How Do People Get Around the Study Area and Surrounding Jurisdictions?

Motor vehicles are, by far, the most common source of personal transportation for residents in the Study Area and surrounding jurisdictions. According to the 2000 Census, 74.3 percent of Study Area residents use a motor vehicle to get to work. However, this is slightly lower when compared to 90.6 percent for residents of Kansas City, 95.4 percent for residents of Independence, 80.5 percent for residents of Jackson County, and 80.5 percent for residents within the State of Missouri. In addition, the percent of workers who carpool, walk/bike to work, or use public transportation is higher for the Study Area than the surrounding jurisdictions.

The mean travel time to work for residents in the Study Area is 22.5 minutes. This is comparable to travel times for residents of Kansas City (21.9 minutes), Independence (24.1 minutes), Jackson County (23.6 minutes), and the State of Missouri (23.8 minutes). **Table 3.2.5** shows means of transportation to work for residents in the Study Area and surrounding jurisdictions.

Table 3.2.5 Means of Transportation to Work

Means of Transportation	Study Area		•	Jackson	Missouri		
to Work		City	Independence	County			
Workers 16 years and	100.0%	100.0%	100.0%	100.0%	100.0%		
over							
Drive alone	74.3%	90.6%	95.4%	80.5%	80.5%		
Carpool	13.3%	11.8%	12.3%	11.5%	11.6%		
Public transportation	5.6%	3.8%	0.8%	2.7%	1.5%		
Bicycle or walk	3.7%	2.4%	0.9%	1.9%	2.3%		
Work at home	2.0%	2.6%	2.1%	2.7%	3.5%		
Other means of	1.0%	0.6%	0.7%	0.6%	0.6%		
transportation							
Mean travel time to work	22.5	21.9	24.1	23.6	23.8		
(minutes)							
Source: U.S. Census Bureau, Census 2000. Study Area data is for the Census Block Groups.							

Describe the Local Community Facilities

There is a variety of local community facilities within the I-70 Study Area, such as schools, churches, emergency services,

and community centers. This section discusses the existing community facilities that are a key part of community and neighborhood cohesion. **Figure 3.2.6** at the end of this chapter shows the location of the community facilities

Neighborhoods

The western half of the Study Area encompasses land uses associated with the City of Kansas City. Kansas City is made up of several local neighborhoods totaling nearly 240 citywide. The following is a list of local neighborhoods within the I-70 Study Area:



- River Market
- Columbus Park
- Downtown
- Westside
- Crossroads District
- Garfield-Independence Plaza
- Downtown East
- Santa Fe
- Budd Park
- East 23rd Street
- Blue Valley Industrial
- Sports Complex

The eastern half of the Study Area includes land uses associated with the City of Independence. In most cases, much of the land use within the entire Study Area contains detached, single-family houses in neighborhoods. However, there are several multi-family (apartment and/or condominium) neighborhoods and mobile home neighborhoods in the Study Area as well.

Churches

There are 64 churches within the I-70 Study Area. Many of the churches are located in the Kansas City portion of the Study Area in the Downtown East, Garfield-Independence, Santa Fe, Budd Park, and East 23rd Street residential neighborhoods.



Peace Baptist Church



William Southern Elementary School

Schools

There are 13 primary and secondary schools found throughout the Study Area. These include:

- Plaza de Niños Preschool
- Missouri First Steps
- Whittier Elementary School
- William Southern Elementary School
- Della Lamb Elementary Center
- Sycamore Elementary School
- Garcia Elementary School
- Phyllis Wheatley Elementary School
- Fairview Alternative Middle School
- Central High School

In addition, the International School of Professional Bartending, Pitcher Academy, and Mattie Rhodes Counseling and Art Center are located within the Study Area.

A majority of the primary and secondary schools are located in the Kansas City portion of the Study Area, especially near downtown Kansas City. Three of the above listed schools (Missouri First Steps, William Southern Elementary, and Sycamore Hills Elementary) are located in the eastern portion of the Study Area, or in the City of Independence.

Colleges and Universities

There are five colleges or universities within the Study Area. Vatterott College, Berean Christian Academy, and ITT Technical Institute are located in the Sports Complex neighborhood. Manual Vocational Technical College and Metropolitan Community College are located near downtown Kansas City, in the Downtown East neighborhood.

<u>Libraries</u>

There is one library within the Study Area, the Kansas City Public Library. This library is located in Downtown Kansas City.

Hospitals

There are no hospitals located within the Study Area.

Emergency Service Facilities

There are eight emergency service facilities located within the Study Area. These include police, ambulance, and fire service facilities. A majority of the emergency facilities are located within the Kansas City portion of the Study Area, which contains seven of the facilities including:

- Two fire department stations (No. 8 and No. 25) located near Downtown Kansas City.
- Two police department buildings located near Downtown Kansas City.
- A police vehicle garage and a police training facility located in the Garfield-Independence neighborhood near the Prospect Avenue interchange.
- A police K-9 training facility located in the Sports Complex neighborhood near the East 31st Street interchange.

Independence Fire Station No. 2 is the only emergency facility in the Independence portion of the Study area and is located along East 39th Street near the Noland Road interchange.

Park and Recreational Areas

There are 28 park and recreational areas located within the Study Area. The Kansas City portion of the Study Area contains 24 of these parks including:

- River Bluff Park
- West Terrace Park
- Ermine Case Jr. Park
- Mulkey Square
- Jarboe Park
- Andrew Drips Park
- Admiral Plaza
- Ilus W. Davis Park
- Columbus Square
- Margaret Kemp Park

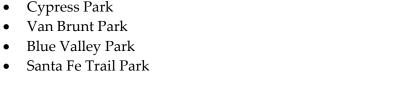


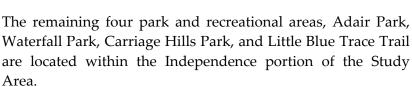
Fire Station at 31st Street and Indiana Avenue



Ermine Case Jr. Park

- Barney Allis Plaza
- Oppenstein Brothers Memorial Park
- Goin' to Kansas City Plaza
- The Parade
- Prospect Plaza Park
- Harmony Park
- Freeway Park
- The Grove
- Montgall Park
- Indiana Park





Community Facilities

There are 40 community facilities located within the Study Area, all of which are within Kansas City. The majority of community facilities are located within downtown Kansas City and the Columbus Park, Garfield-Independence, and Downtown East neighborhoods. These facilities include local meeting halls, missions, development centers, community gardens, family and youth centers, a local YMCA, and the Bartle Hall Convention Center.

Bicycle and Pedestrian Facilities

There are several bicycle and pedestrian facilities located within the Study Area. According to the I-70 Major Investment Study (2002), a majority of the facilities are multi-use trails that average 2.4 miles long with facilities ranging from one-quarter mile to seven miles long. However, only a few of the trails meet the national standard for bicycle paths: having smooth, paved surfaces that are a minimum of 10 feet wide. Most of the trails are park and recreational facilities and are closed loop trails or linear facilities that traverse parklands with few, if any, access points



Gregg Klice Community



Pedestrian Bridge East of Van **Brunt Boulevard**

Aside from separate bicycle and pedestrian trails, there are a number of crossing points for pedestrian and bicycle traffic within the Study Area. These are along streets and highways that cross over or under the I-70 highway. For example, two pedestrian bridges over I-70 in the Study Area provide local residents the ability to cross over the highway without coming into contact with vehicle traffic. The first bridge allows bicycles/pedestrians to cross over the I-70 highway near Cypress Avenue, while the second bridge bicycles/pedestrians to cross over the highway near Oakley Avenue.

How will the Strategies Affect Communities and Neighborhoods within the Study Area?

The following paragraphs will discuss the anticipated effects of the strategies on existing neighborhoods and community facilities. Many of the potential impacts of the strategies on neighborhoods such as relocations, noise, air quality, and visual appearance are discussed in detail in other sections of this FTEIS. These effects will be mentioned briefly here and readers will be directed to the other sections of this document.

Strong neighborhoods are those with an identity, where neighbors have easy access to each other and are familiar with one another. Transportation projects can impact neighborhoods by relocating residents, dividing the neighborhood, removing local businesses, and creating an atmosphere that discourages neighbors from interacting with each other.

All Build strategies will affect existing neighborhoods. MoDOT will work with local communities and neighborhoods to reduce and minimize neighborhood impacts as much as possible.

No-Build Strategy

The No-Build Strategy will affect the neighborhoods surrounding the existing corridor as increased congestion will make it more difficult to live near I-70 and the downtown loop. Without improvements, local residents can expect



Margaret Kemp Park at 10th and Harrison Street.

increased congestion leading to increase noise and air quality issues. These effects are discussed in more detail in **Section 3.10 Noise** and **Section 3.11 Air Quality**.

Increased congestion will lead to the use of alternative routes which are often arterial roads through neighborhoods which will make it more difficult for local residents to access local businesses.

Improve Key Bottlenecks Strategy

The Improve Key Bottlenecks Strategy will potentially require 188 residential and 55 commercial displacements. The relocation impacts are discussed in more detail in **Section 3.4 Relocations**.

The Improve Key Bottlenecks Strategy will have impacts on a variety of neighborhood facilities and amenities. The effects of the Improve Key Bottlenecks Strategy on neighborhoods and community facilities are discussed in the following text. For ease of explanation, the Study Area has been divided up into five Sub-Areas.

Downtown Sub-Area: The Improve Key Bottlenecks Strategy will not have impacts to any schools, libraries, emergency services, or colleges/universities. There are potential noise impacts at Temple Baptist Church located at the intersection of East 9th Street and Harrison Street. There are potential noise impacts at two community facilities, the Don Bosco Senior Center and the reStart Incorporated. Potential impacts at Jarboe Park, West Terrace Park, Ermine Case Jr. Park, and Margaret Kemp Park are possible. There is the opportunity to positively impact bicycle and pedestrian facilities while improvements constructing bottleneck providing additional pedestrian and bicycle friendly crossings of the freeways.

<u>Urban Sub-Area</u>: The Improve Key Bottlenecks Strategy will not have impacts to any schools, libraries, emergency services, or colleges/universities. Noise impacts are possible at four churches. The Salvation Army building near Truman Road and Forest Avenue may be displaced. Cypress Park is the only potential park affected in the urban section of this project. The



West Terrace Park



Freeway Park at 14th and Indiana Avenue

neighborhood garden area known as Freeway Park will be displaced. This site is owned by MoDOT and leased to the City of Kansas City as a neighborhood garden. The two existing pedestrian bridges and interchange improvements will provide the opportunity to enhance bicycle and pedestrian movements in the urban section of the Study Area.

<u>I-435 Sub-Area</u>: The Improve Key Bottlenecks Strategy will not have impacts to any schools, libraries, emergency services, churches, community facilities, or park lands. The primary community impact in this area is the potential relocation of Vatterott College.

<u>Suburban Sub-Area</u>: The Improve Key Bottlenecks Strategy will not have impacts to any libraries, emergency services, or park lands. The Christ Covenant Church and Berean Christian Academy will require a relocation of their access drive. A portion of the Park and Ride lot at Blue Ridge Boulevard would be impacted.

<u>I-470 Sub-Area</u>: The Improve Key Bottlenecks Strategy will not have impacts to any schools, libraries, emergency services, churches, or community facilities. There are potential impacts to a parking lot for a church. A small strip of Carriage Hills Park may be needed in this strategy.

The Improve Key Bottlenecks Strategy may also have noise, air quality, and visual effects on residents, businesses, and other noise sensitive properties in the adjacent neighborhoods. These effects are discussed in more detail in Section 3.3 Public Land, Section 3.7 Visual Effects, 3.10 Noise, and Section 3.11 Air Quality

Add General Lanes Strategy

The Add General Lanes Strategy will potentially require 303 residential and 93 commercial displacements. The relocation impacts are discussed in more detail in **Section 3.4 Relocations**.

<u>Downtown Sub-Area</u>: The Add General Lanes Strategy will not have impacts on any schools, libraries, emergency services, or colleges/universities. There is the potential for the relocation of Temple Baptist Church located at the intersection of East 9th Street and Harrison Street. Other community relocations include the FBI building and the Kansas City Community Center. There are potential additional noise impacts at two community facilities, the Don Bosco Senior Center and the reStart Incorporated. Potential parks impacted would include Jarboe Park, West Terrace Park, Ermine Case Jr. Park, and Margaret Kemp Park. There is the opportunity to positively impact bicycle and pedestrian facilities while constructing improvements by providing additional pedestrian and bicycle friendly crossings of the freeways.

<u>Urban Sub-Area</u>: The Add General Lanes Strategy will not have impacts to any schools, libraries, emergency services, or colleges/universities. Relocation impacts are possible for three churches with potential noise impacts also affecting three churches. The Salvation Army building near Truman Road and Forest Avenue may be displaced. The City Mission Family Center may receive increased noise impacts. Cypress Park is the only park potentially affected in this section of this project. The neighborhood garden area known as Freeway Park will be displaced. This site is owned by MoDOT and leased to the City of Kansas City as a neighborhood garden. The two existing pedestrian bridges and interchange improvements will provide the opportunity to enhance bicycle and pedestrian movements in the urban section of the Study Area.

<u>I-435 Sub-Area</u>: The Add General Lanes Strategy will not have impacts to any libraries, emergency services, churches, or park lands. The primary community impact in this area is the potential relocation of Vatterott College. Noise impacts may affect the Fellowship of Christian Athletes.

<u>Suburban Sub-Area</u>: The Add General Lanes Strategy will not have impacts to any libraries, emergency services, or park lands. The Christ Covenant Church and Berean Christian Academy would require a relocation of their access drive. A portion of the Park and Ride lot at Blue Ridge Boulevard would be impacted.

<u>I-470 Sub-Area</u>: The Add General Lanes Strategy will not have impacts to any schools, libraries, emergency services, churches, or community facilities. There are potential impacts



City Mission Family Center at 14th Street and Wabash Avenue

to a parking lot for a church. A small strip of Carriage Hills Park may be needed in this strategy.

Where residential and business displacements will be required, they would most likely occur near the existing roadway and interchanges. If businesses are displaced, local residents may have to travel farther to eat at a restaurant or fill up at a gas station.

The Add General Lanes Strategy may also have noise, air quality, and visual effects on residents in the adjacent neighborhoods. These effects are discussed in more detail in Section 3.7 Visual Effects, 3.10 Noise, and Section 3.11 Air Quality.

<u>Transportation Improvement Corridor Strategy</u>

The Transportation Improvement Corridor Strategy will require 444 residential and 111 commercial displacements. The relocation impacts are discussed in more detail in **Section 3.4 Relocations**.

<u>Downtown Sub-Area</u>: The Transportation Improvement Corridor Strategy will not have impacts to any schools, libraries, emergency services, or colleges/universities. There is the potential for the relocation of Temple Baptist Church located at the intersection of East 9th Street and Harrison Street. There are potential additional noise impacts at two community facilities, the Don Bosco Senior Center and the reStart Incorporated. Potential parks impacts would include Jarboe Park, West Terrace Park, Ermine Case Jr. Park, and Margaret Kemp Park. There is the opportunity to positively impact bicycle and pedestrian facilities while constructing improvements by providing additional pedestrian and bicycle friendly crossings of the freeways.

<u>Urban Sub-Area</u>: The Transportation Improvement Corridor Strategy will not have impacts to any schools, libraries, emergency services, or colleges/universities. Relocation impacts are possible for six churches with additional potential noise impacts affecting two churches. The Salvation Army and the City Mission Family Center buildings may be displaced. Cypress Park is the only potential park affected in



Salvation Army Warehouse at 1110 Truman Road

this section of this project. The neighborhood garden area known as Freeway Park will be displaced. This site is owned by MoDOT and leased to the City of Kansas City as a neighborhood garden. The two existing pedestrian bridges and interchange improvements will provide the opportunity to enhance bicycle and pedestrian movements in the urban section of the Study Area.

<u>I-435 Sub-Area</u>: The Transportation Improvement Corridor Strategy will not have impacts to any libraries, emergency services, churches, or park lands. The primary community impact in this area is the potential relocation of Vatterott College. Noise impacts may affect the Fellowship of Christian Athletes.

<u>Suburban Sub-Area</u>: The Transportation Improvement Corridor Strategy will not have impacts to any libraries, emergency services, or park lands. The Christ Covenant Church and Berean Christian Academy would require a relocation of their access drive. A portion of the Park and Ride lot at Blue Ridge Boulevard would be impacted.

<u>I-470 Sub-Area:</u> The Transportation Improvement Corridor Strategy will not have impacts to any schools, libraries, emergency services, churches, or community facilities. There are potential impacts to a parking lot for a church. A small strip of Carriage Hills Park may be needed in this strategy.

Where residential and business displacements will be required, they would most likely occur near the existing roadway and interchanges. If businesses are displaced, local residents may have to travel farther to dine at a restaurant, fill up their car at a gas station, or enjoy a park or recreation area.

The Transportation Improvement Corridor Strategy may also have noise, air quality, and visual effects on residents in the adjacent neighborhoods. These effects are discussed in more detail in Section 3.7 Visual Effects, 3.10 Noise, and Section 3.11 Air Quality.

<u>Identified Preferred Strategy</u>

The Identified Preferred Strategy will potentially require 193 residential and 19 commercial displacements using the widest footprint option east of I-435. The relocation impacts are discussed in more detail in **Section 3.4 Relocations**.

The Identified Preferred Strategy will have impacts on a variety of neighborhood facilities and amenities. The effects of the Identified Preferred Strategy on neighborhoods and community facilities are discussed in the following text. For ease of explanation, the Study Area has been divided up into five Sub-Areas.

Downtown Sub-Area: The Identified Preferred Strategy will not have impacts to any schools, libraries, emergency services, or colleges/universities. There are potential noise impacts at Temple Baptist Church located at the intersection of East 9th Street and Harrison Street. There are also potential noise impacts at two community facilities, the Don Bosco Senior Center and ReStart Incorporated. Potential impacts at Jarboe Park, West Terrace Park, Ermine Case Jr. Park, and Margaret Kemp Park are possible. There is the opportunity to positively impact bicycle and pedestrian facilities during construction of bottleneck improvements by providing additional pedestrian and bicycle friendly crossings of the freeways.

<u>Urban Sub-Area</u>: The Identified Preferred Strategy will not have impacts to any schools, libraries, emergency services, or colleges/universities. Noise impacts are possible at four churches. The Salvation Army warehouse building near Truman Road and Forest Avenue may be displaced. Cypress Park is the only potential park affected in the urban section of this project. The neighborhood garden area known as Freeway Park will be displaced. This site is owned by MoDOT and leased to the City of Kansas City as a neighborhood garden. The two existing pedestrian bridges and interchange improvements will provide the opportunity to enhance bicycle and pedestrian movements in the urban section of the Study Area.

<u>I-435 Sub-Area</u>: The Identified Preferred Strategy will not have impacts to any libraries, emergency services, churches, or park

lands. The primary community impact in this area is the potential relocation of Vatterott College. Noise impacts may affect the Fellowship of Christian Athletes building.

<u>Suburban Sub-Area</u>: The Identified Preferred Strategy will not have impacts to any libraries, emergency services, or park lands. The Christ Covenant Church and Berean Christian Academy would require a relocation of their access drive. The Park and Ride lot at Blue Ridge Boulevard would potentially be impacted.

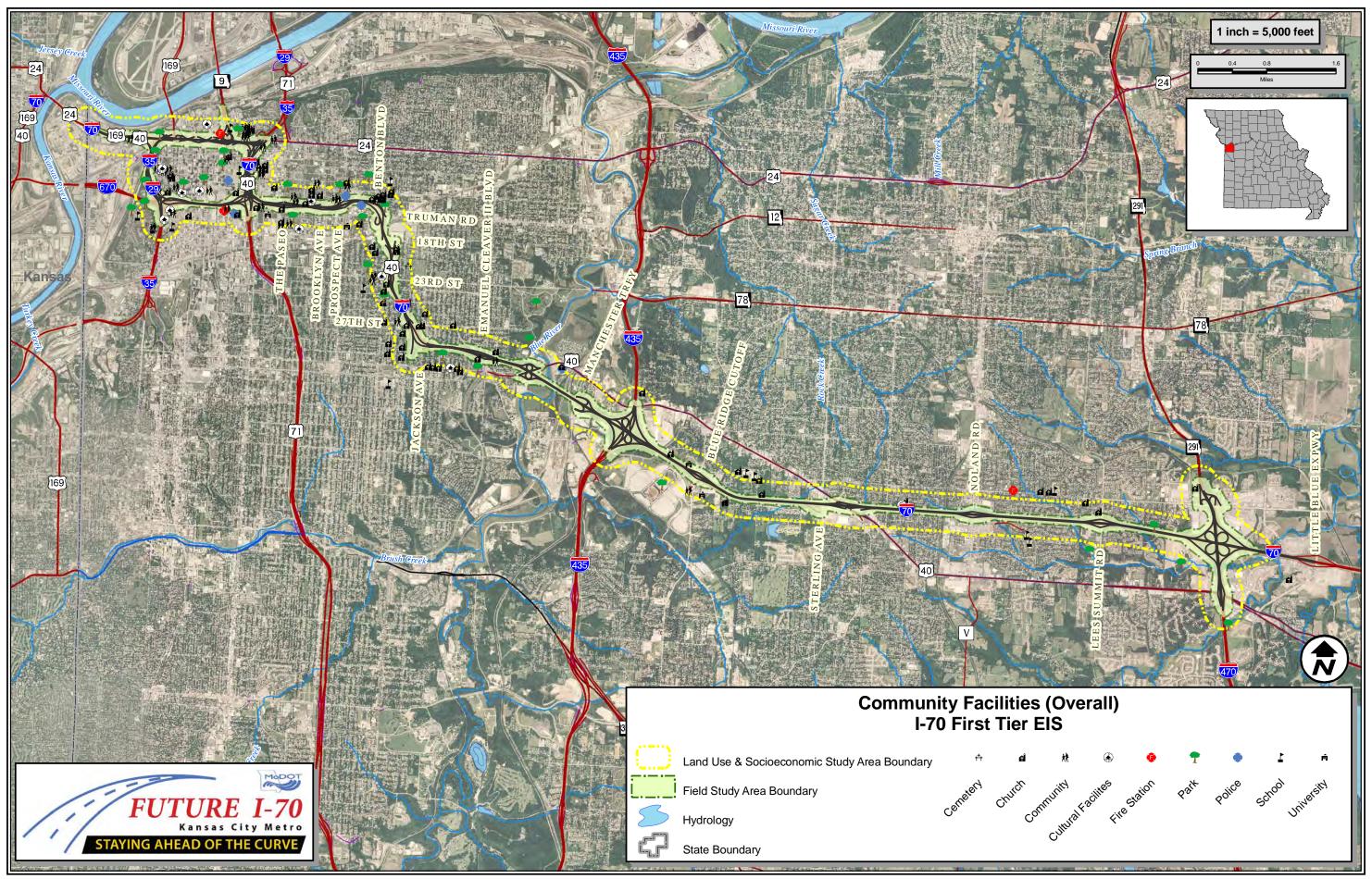
<u>I-470 Sub-Area</u>: The Identified Preferred Strategy will not have impacts to any schools, libraries, emergency services, churches, or community facilities. If the Add General Lanes Strategy is selected, there are potential impacts to a church parking lot and a small strip of Carriage Hills Park may be needed in this strategy.

Where residential and business displacements will be required, they would most likely occur near the existing roadway and interchanges. If businesses are displaced, local residents may have to travel farther to dine at a restaurant, fill up their car at a gas station, or enjoy a park or recreation area.

The Identified Preferred Strategy may also have noise, air quality, and visual effects on residents in the adjacent neighborhoods. These effects are discussed in more detail in Section 3.7 Visual Effects, 3.10 Noise, and Section 3.11 Air Quality.

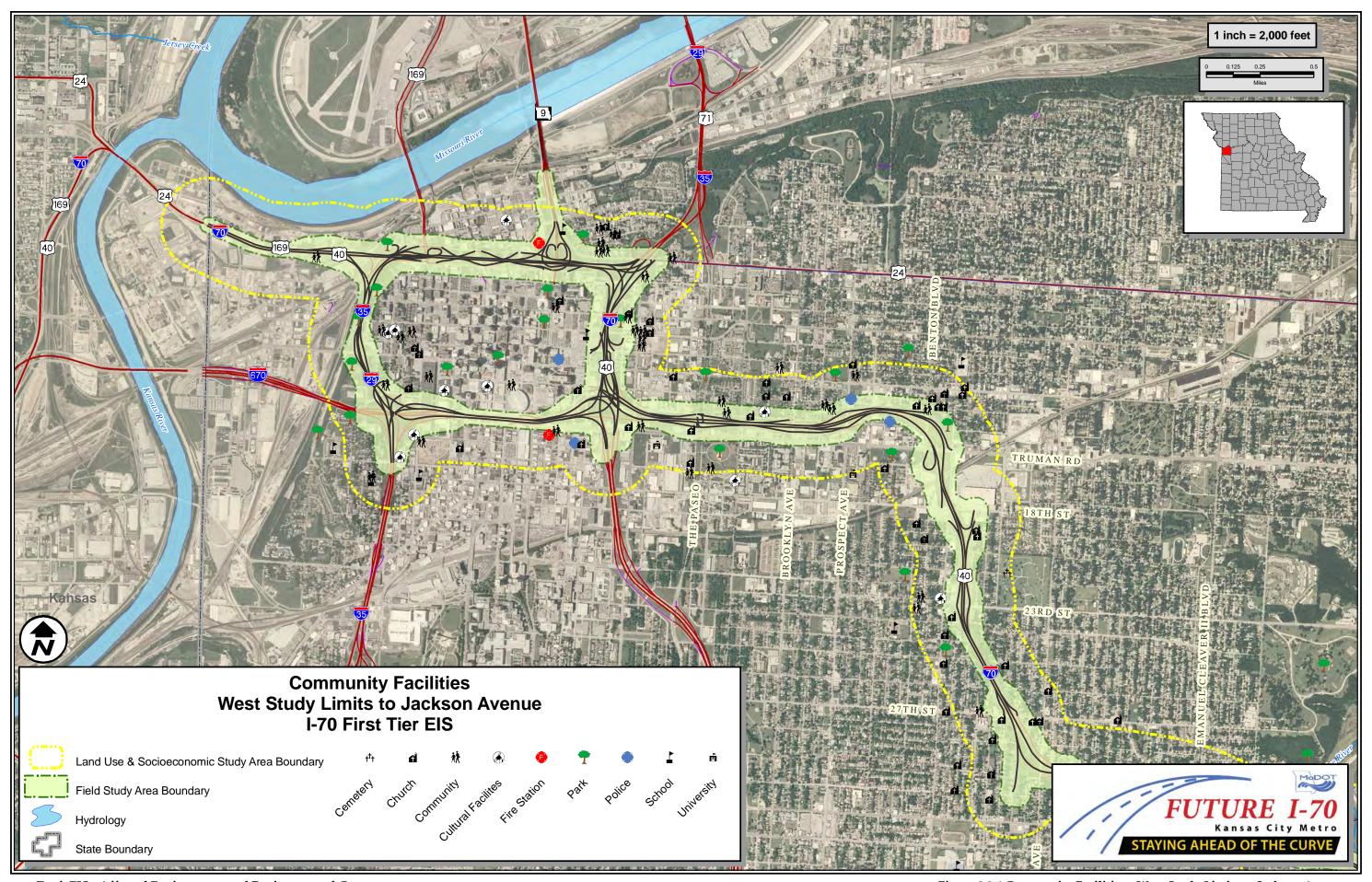
How Will Community and Neighborhood Impacts Be Refined in the Second Tier Studies?

The next step in the environmental stage of this project is to conduct Second Tier studies which will identify the improvements between east of I-435 and I-470 and further evaluate and refine the neighborhood and community impacts of the Identified Preferred Strategy. The Second Tier studies will refine each strategy and their footprints to avoid or minimize the identified neighborhood and community impacts where possible.



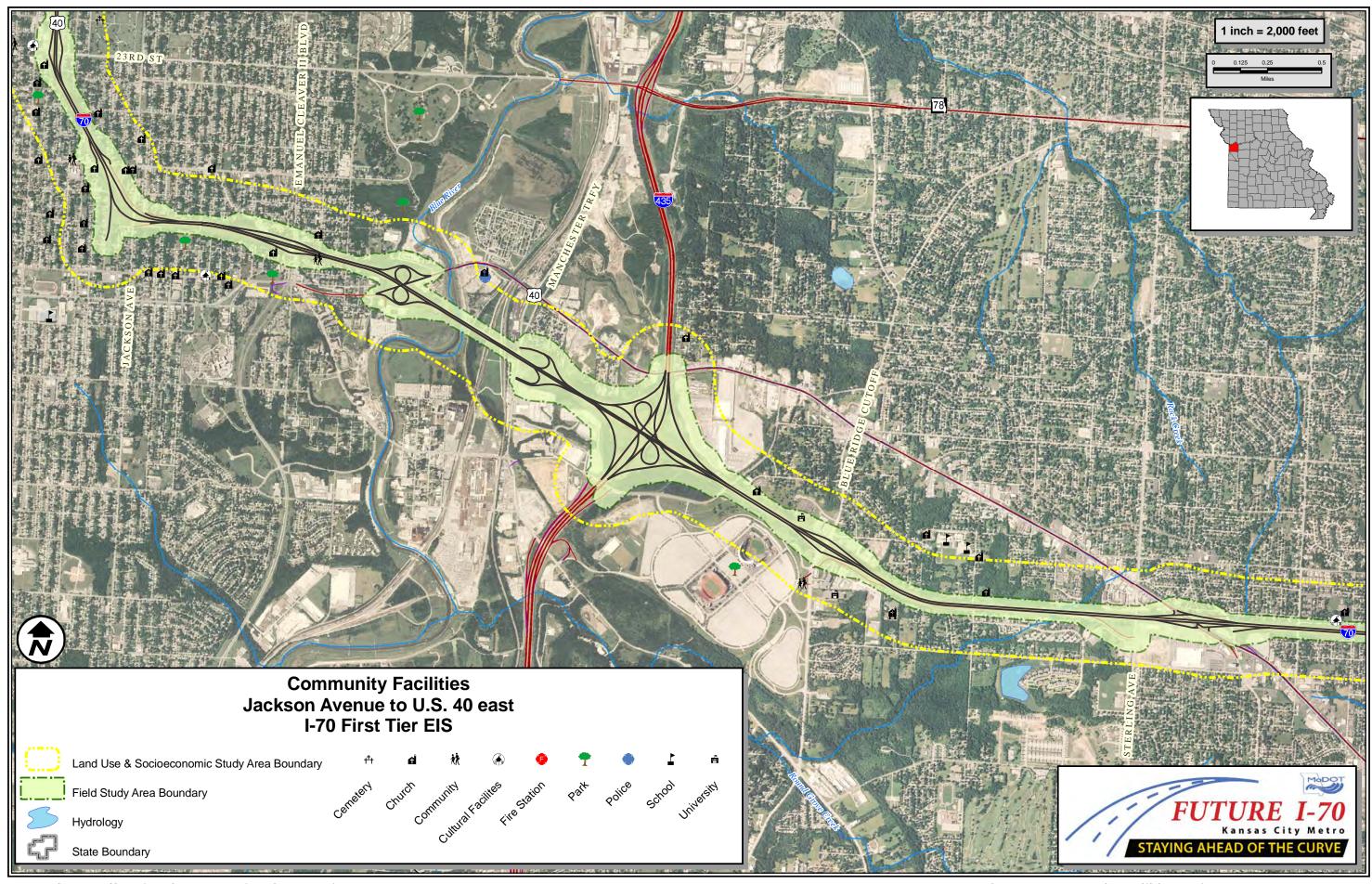
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Figure 3.2.6 Community Facilities - Overall



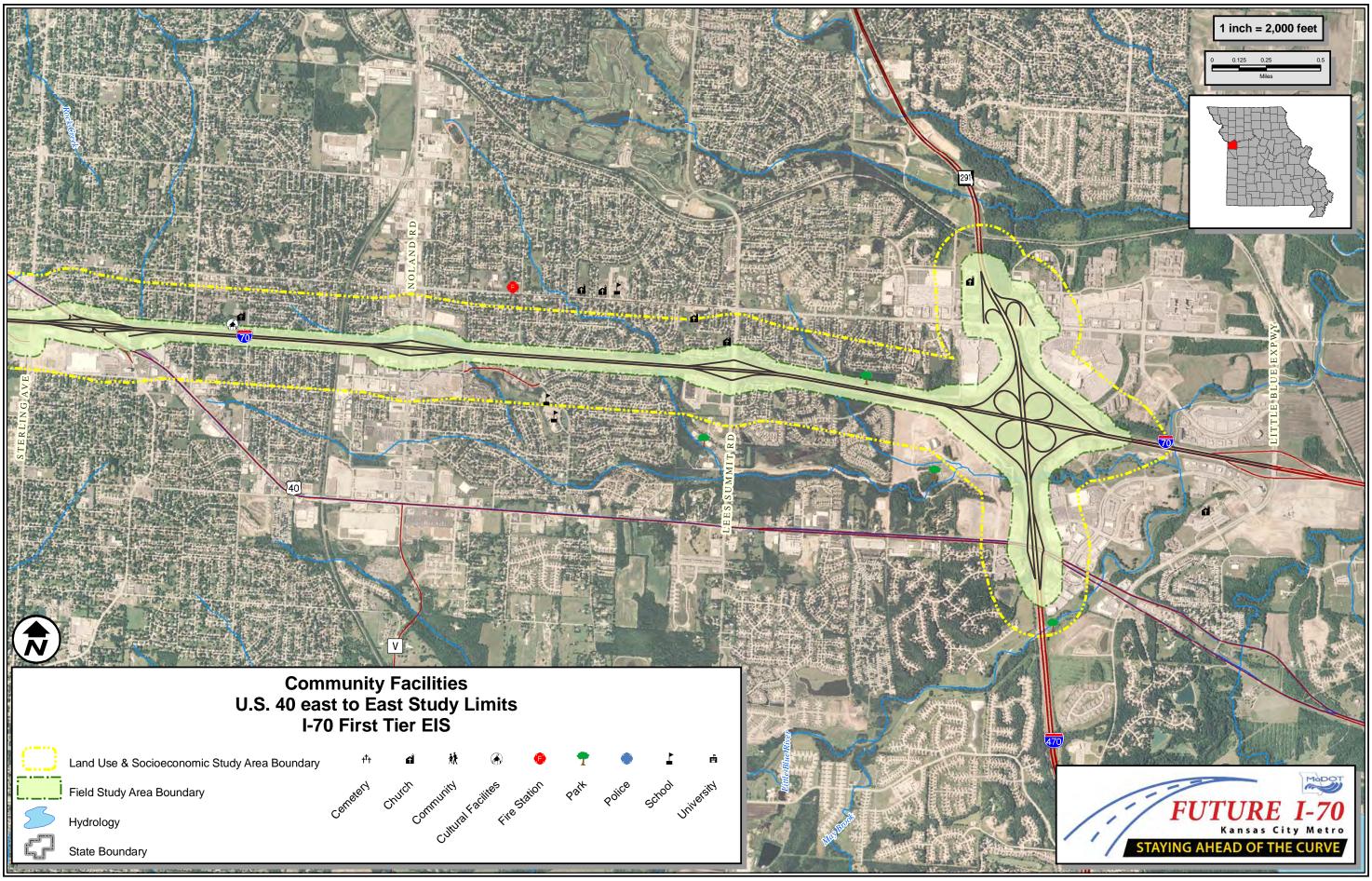
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Figure 3.2.6 Community Facilities - West Study Limits to Jackson Avenue



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Figure 3.2.6 Community Facilities - Jackson Avenue to U.S. 40 east



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Figure 3.2.6 Community Facilities - U.S. 40 east to East Study Limits

3.3 Public Lands and Facilities

This section discusses the potential affects the proposed strategies may have on public lands and facilities and properties protected by Section 4(f) of the Department of Transportation Act or Section 6(f) of the Land and Water Conservation Act.

What Parks are in the Study Area?

Public lands and facilities include parks and community centers. There are 28 parks located in the Study Area. These parks are shown on **Figure 3.3.1** at the end of this chapter.

- River Bluff Park is located at 4th Street and Beardsley Road in the River Market along the Riverfront Heritage Trail. The 1.18 acre park overlooks the West Bottoms and the Missouri and Kansas Rivers. The park's amenities include a scenic overlook and an art installation honoring the Lewis and Clark Expedition.
- West Terrace Park is located along the West Bluff from 6th Street to 17th Street. The park is 30.56 acres and includes the Ermine Case Jr. Park, Mulkey Square, and Jarboe Park. The park's amenities include the Lewis and Clark Memorial, Clark's Point Memorial, Corps of Discovery Monument, French Traders Memorial Plaques, and the Riverfront Heritage Trail.
- Ermine Case Jr. Park is 1.67 acres located at 10th Street and Jefferson Street. The park's amenities include the Riverfront Heritage Trail.
- Mulkey Square is 8.87 acres located at 13th Street and Summit Street. The park's amenities include the Hereford Bull Monument, a lighted ball diamond, and a shelter.
- Jarboe Park is located at 17th Street and Jarboe Street. The park is 3.94 acres and its amenities include a wading pool and a ball diamond.
- Andrew Drips Park is 0.16 acres located at 16th Street and Belleview Avenue. The park's amenities include the Andrew Drips Monument.
- Admiral Plaza is one acre and located at Admiral Boulevard and Oak Street. This small park has concrete walkways.

What is Section 4(f)?

Section 4(f) of the Department of Transportation Act of 1966 states that no transportation project should be approved which requires the use of land from a public park, recreation area, wildlife and waterfowl refuge, or historic site unless there is no feasible or prudent strategy to the use of such land.

What is Section 6(f)?

Section 6(f) of the Land and Water Conservation Act prohibits the conversion of any property acquired or developed with the assistance of the land and water conservation funds (LWCF) to anything other than public outdoor recreation use without the approval of the Secretary of the Department of Interior.



Columbus Square



Oppenstein Brothers Memorial Park

- Ilus W. Davis Park is located at 11th Street and Oak Street. The park is 5.2 acres and its amenities include the Bill of Rights Monument, the City Employees Memorial, and the Ilus W. Davis Memorial.
- Columbus Square is 4.18 acres located at Missouri Avenue and Holmes Street. The square's amenities include a shelter.
- Margaret Kemp Park is 2.94 acres located at 10th Street and Harrison Street. The park amenities include a playground.
- Barney Allis Plaza is a 3.69 acre urban park located at 12th Street and Wyandotte Street. The park is home to the Kansas City Explorers Tennis Team and its other amenities include fountains, sculptures, landscaped walkways, seating areas, and free wireless internet access.
- Oppenstein Brothers Memorial Park is a one acre urban park located at 12th Street and Walnut Street in Kansas City's Central Business District. This small park seating areas.
- Goin' to Kansas City Plaza is 4.8 acres, formerly known as the Paseo Green, located at the Paseo Boulevard and 12th Street. The park's amenities include walkways, the Colonnade Sculpture, and the Spanish Cannon Memorial.
- The Parade is a 20.99 acre park located at Paseo Boulevard and Truman Road. Its amenities include the Parade Memorial, a lighted ball diamond, an asphalt running track, four lighted tennis courts, and the Black Archives.
- Prospect Plaza Park is located at 12th Street and Prospect Avenue. The park is 7.2 acres and its amenities include a lighted ball diamond and two lighted tennis courts.
- Harmony Park is located at 10th Street and Agnes Avenue. The park is 1.4 acres and its amenities include a spray ground.
- Freeway Park is 2.27 acres located at 14th Street and Indiana Avenue. The park's amenities include a community garden. This site is owned by MoDOT and leased to the City of Kansas City as a neighborhood garden. The current ten year lease expires on March

- 31, 2012. Either party has the right to terminate the lease by giving a thirty day written notice.
- The Grove is located at Benton Boulevard and Truman Road. The park is 11.33 acres and its amenities include a swimming pool, a wading pool, a spray ground, and two ball diamonds (one lighted).
- Montgall Park is located at 22nd Street and Agnes Avenue. The park is 6.10 acres and its amenities include a half mile asphalt exercise trail and a shelter.
- Indiana Park is located at 25th Street and Indiana Avenue. The park is 2.38 acres and its amenities include a ball diamond.
- Cypress Park is 5.19 acres located at 29th Street and Cypress Avenue. Amenities include a playground, pavilion, and parking.
- Van Brunt Park is 13.2 acres located in Van Brunt Boulevard. This park has sidewalks and trees.
- Blue Valley Park is located at 23rd Street and Topping Avenue. The park is 238.5 acres and its amenities include Santa Fe Trail Park, Heritage Fountain, three ball diamonds (two lighted), 27-hole flying disc golf course, Bales Lake, three shelters, and a recreation center.
- Santa Fe Trail Park is located at 23rd Street and Topping Avenue. The park is 34.89 acres and its amenities include a Santa Fe Trail marker.
- Adair Park is located at 4400 S. Lee's Summit Road. The park is 40 acres and its amenities include softball fields, five shelters, 40 picnic tables, and a nature area with a half mile trail.
- Carriage Hills Park is located at 16841 E. 41st Street.
 The park is three undeveloped acres and includes a quarter mile walking trail.
- Waterfall Park is located at 4501 S. Bass Pro Drive. The park's amenities include an 18 acre lake, three barbeque grills, a playground, 12 picnic tables, restrooms, a shelter, a quarter mile walking trail, and bicycle trail.
- Little Blue Trace Park is a 1,856 acre park that borders the Little Blue River from Longview Lake north to Blue Mills Road. The park crosses under I-70 just east of I-470. A ten mile hiking and bicycle trail highlights the



Land and Water Conservation Fund Sign at River Bluff Park

All of the parks qualify for protection under Section 4(f) because they are publicly owned, except Freeway Park which is owned by MoDOT and leased to City of Kansas City, Missouri for temporary community garden use. Four of the parks also qualify for protection under Section 6(f); River Bluff Park, Oppenstein Brothers Memorial Park, The Parade, and Little Blue Trace Park.

What Community Centers are in the Study Area?

There are three community centers located in the Study Area that could be potentially affected by the proposed strategies.

- Chouteau Youth Center is located at Independence Avenue and Tracy Avenue in the Kansas City Housing Authority's Chouteau Courts development.
- Clymer Community Center is located at 1301 Vine Street in the Kansas City Housing Authority's Theron B. Watkins Homes development.
- Gregg Klice Community Center is located at 1600 John "Buck" O'Neil Way. The community center's facilities include a swimming pool, a wading pool, and a spray ground.

What Other Public Lands are in the Study Area?

In addition to parks and community centers, there are six boulevards with segments in the Study Area. As part of the Kansas City Parks and Boulevard System, these boulevards are publicly owned and the entire system is a National Historic Civil Engineering Landmark. The six boulevards with segments in the Study Area are:

- Admiral Boulevard from Grand Avenue to Highland Avenue.
- Benton Boulevard from St. John Avenue to Swope Parkway.
- Benton Plaza from Benton Boulevard to Bellefontaine Avenue on the south side of The Grove.



Gregg Klice Community Center

- Broadway Boulevard from I-70 to south line of 25th
 Street as it intersects West Pennway; the Broadway-West Pennway viaduct; and 31st Street to 43rd Street.
- Grand Boulevard from 28th Street and Main Street to Missouri River Levee Road at the ASB Bridge.
- Van Brunt Boulevard from Gladstone Boulevard to 31st Street.

Also in the Study Area is the Harry S. Truman Sports Complex located at I-70 and Blue Ridge Cutoff. The complex includes Ewing M. Kauffman Stadium home of the Kansas City Royals Major League Baseball team and Arrowhead Stadium home of the Kansas City Chiefs National Football League team. The complex is owned by Jackson County and managed by the Jackson County Sports Complex Authority.

There are historic sites in the Study Area that would potentially qualify for protection under Section 4(f). Further discussion of historic sites and how the strategies will affect them is located in **Section 3.9 Historic and Archaeological Resources**.

How Will the Strategies Affect Public Lands and Facilities and Potential Section 4(f) or 6(f) Properties?

As this study continues and in the Second Tier studies, reasonable attempts to avoid Section 4(f) and 6(f) properties will be made. If Section 4(f) or 6(f) properties cannot be reasonably avoided, efforts to minimize impacts to these properties will be made. There is always the possibility that reasonable efforts to avoid or minimize impacts are not adequate. In such cases, Section 4(f) or 6(f) properties will be mitigated. For any Section 4(f) properties affected, the Second Tier studies will need to complete a Section 4(f) evaluation demonstrating that there are no prudent or feasible alternatives to using the protected park, recreation, or historic land. For any Section 6(f) properties affected, the Second Tier studies will need to complete a Section 6(f) evaluation.

The three Build Strategies may all affect parks or other public lands through use for building highway improvements or for construction easements. Public lands immediately adjacent to the downtown loop or I-70 have the greatest potential for impacts should efforts to avoid become unreasonable.

No-Build Strategy

The No-Build Strategy will have no affect on any of the properties protected under Section 4(f) or Section 6(f) or any other public land.

Improve Key Bottlenecks Strategy

The Improve Key Bottlenecks Strategy may impact West Terrace Park and Ermine Case Jr. Park as the downtown loop access is improved.

There would be potential impacts to Margaret Kemp Park with the reconfiguration of the access ramps on the east side of the downtown loop in each Build Strategy.

I-70 currently spans the Goin' to Kansas City Park which is located in the Paseo Boulevard median. Any improvements to I-70 would temporarily impact this park during construction.

There would be impacts to Carriage Hills Park and Little Blue Trace Park with the I-470 interchange improvements.

The area known as Freeway Park is home to a community garden on land leased to the City of Kansas City from MoDOT. Each Build Strategy will use the area to reconfigure I-70 access to Truman Road.

Add General Lanes Strategy

The interchange improvements to add the missing directional movements in the southwest corner of the downtown loop would potentially impact five parks: Mulkey Square, Jarboe Park, Andrew Drips Park, Ermine Case Jr. Park, and West Terrace Park.

There would potentially be impacts to Margaret Kemp Park with the reconfiguration of the access ramps on the east side of the downtown loop in each Build Strategy.



Margaret Kemp Park



Community Garden at Freeway Park

I-70 currently spans the Goin' to Kansas City Park which is located in the Paseo Boulevard median. Any improvements to I-70 would temporarily impact this park during construction.

There would potentially be impacts to Carriage Hills Park and Little Blue Trace Park with the I-470 interchange improvements.

The area known as Freeway Park is home to a community garden on land leased to the City of Kansas City from MoDOT. Each Build Strategy will use the area to reconfigure I-70 access to Truman Road.

<u>Transportation Improvement Corridor Strategy</u>

The Transportation Improvement Corridor Strategy is expected to impact Jarboe Park, Andrew Drips Park, West Terrace Park, and Ermine Case Jr. Park.

There would potentially be impacts to Margaret Kemp Park with the reconfiguration of the access ramps on the east side of the downtown loop in each Build Strategy.

I-70 currently spans the Goin' to Kansas City Park which is located in the Paseo Boulevard median. Any improvements to I-70 would temporarily impact this park during construction.

There would potentially be impacts to Cypress Park with the additional lanes required for the transportation improvement corridor.

There will be impacts to Carriage Hills Park and Little Blue Trace Park with the I-470 interchange improvements.

The area known as Freeway Park is home to a community garden on land leased to the City of Kansas City from MoDOT. Each Build Strategy will use the area to reconfigure I-70 access to Truman Road.

<u>Identified Preferred Strategy</u>

The Identified Preferred Strategy may impact West Terrace Park and Ermine Case Jr. Park as downtown loop access is improved.

There would be potential impacts to Margaret Kemp Park with the reconfiguration of the access ramps on the east side of the downtown loop.

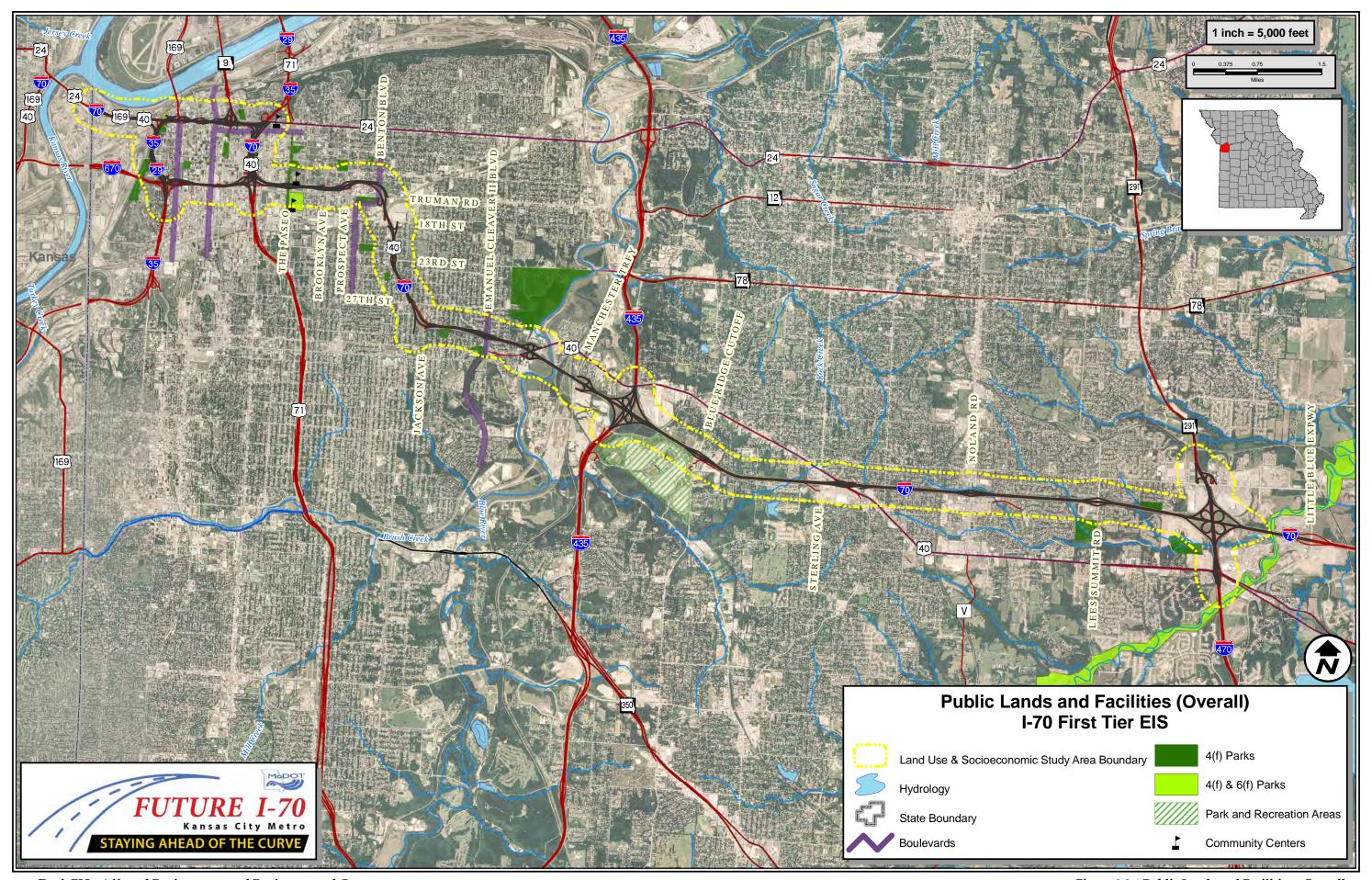
I-70 currently spans the Goin' to Kansas City Park which is located in the Paseo Boulevard median. Any improvements to I-70 would temporarily impact this park during construction.

The area known as Freeway Park is home to a community garden on land leased to the City of Kansas City from MoDOT. The Identified Preferred Strategy will use the area to reconfigure I-70 access to Truman Road.

Depending on the selected strategy east of I-435 during the Second Tier studies, there are potentially impacts to Carriage Hills Park and Little Blue Trace Park with proposed improvements to the I-470 interchange.

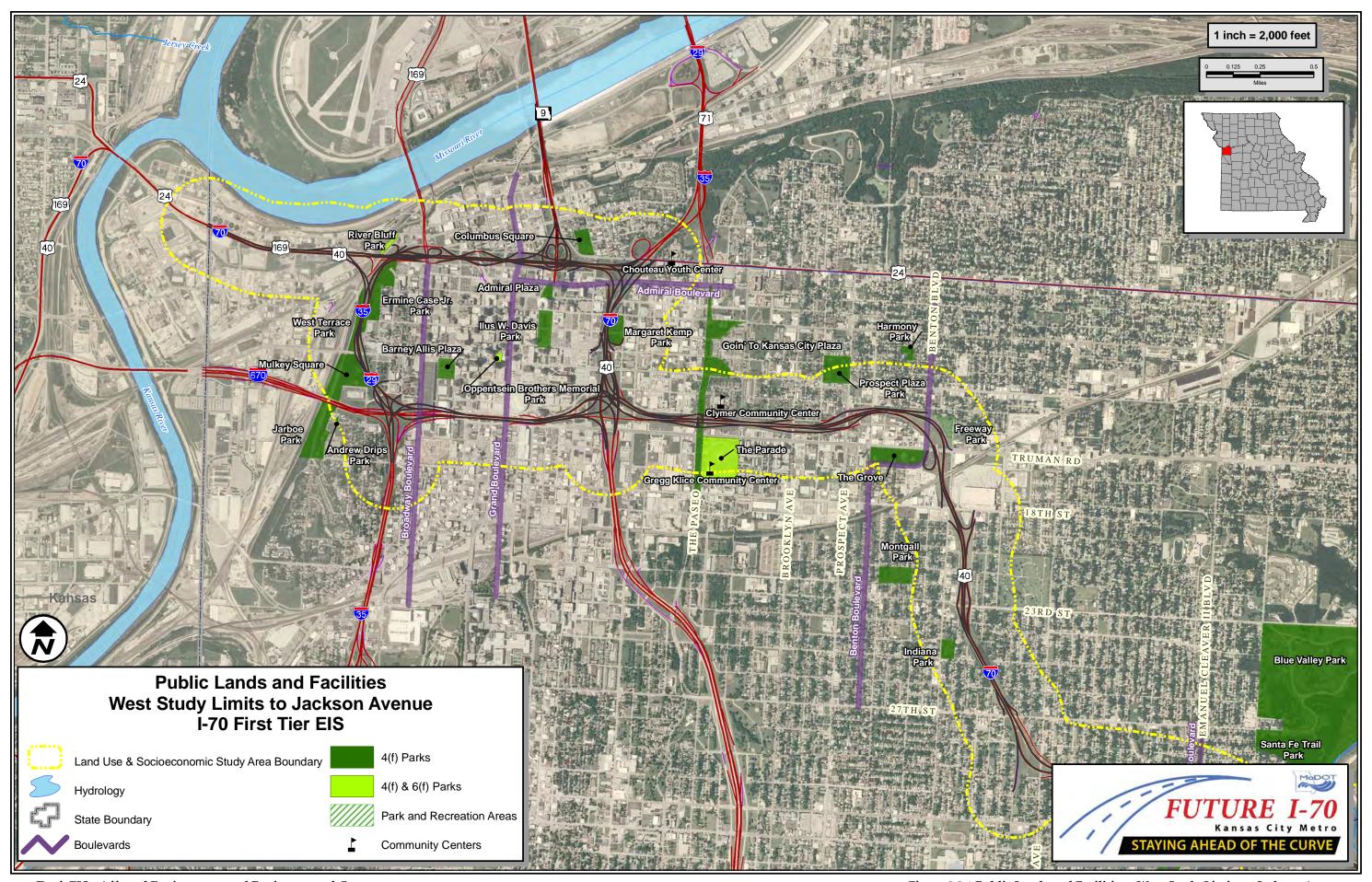
What are the Steps for Public Lands and Facilities in the Second Tier Studies?

The Second Tier studies and additional design efforts will likely narrow the impact area and work to avoid, minimize, and mitigate impacts to Section 4(f) and Section 6(f) park lands in the Study Area. Section 4(f) and Section 6(f) evaluations would need to be completed for any affected parks, recreation, or historic properties protected by these laws.



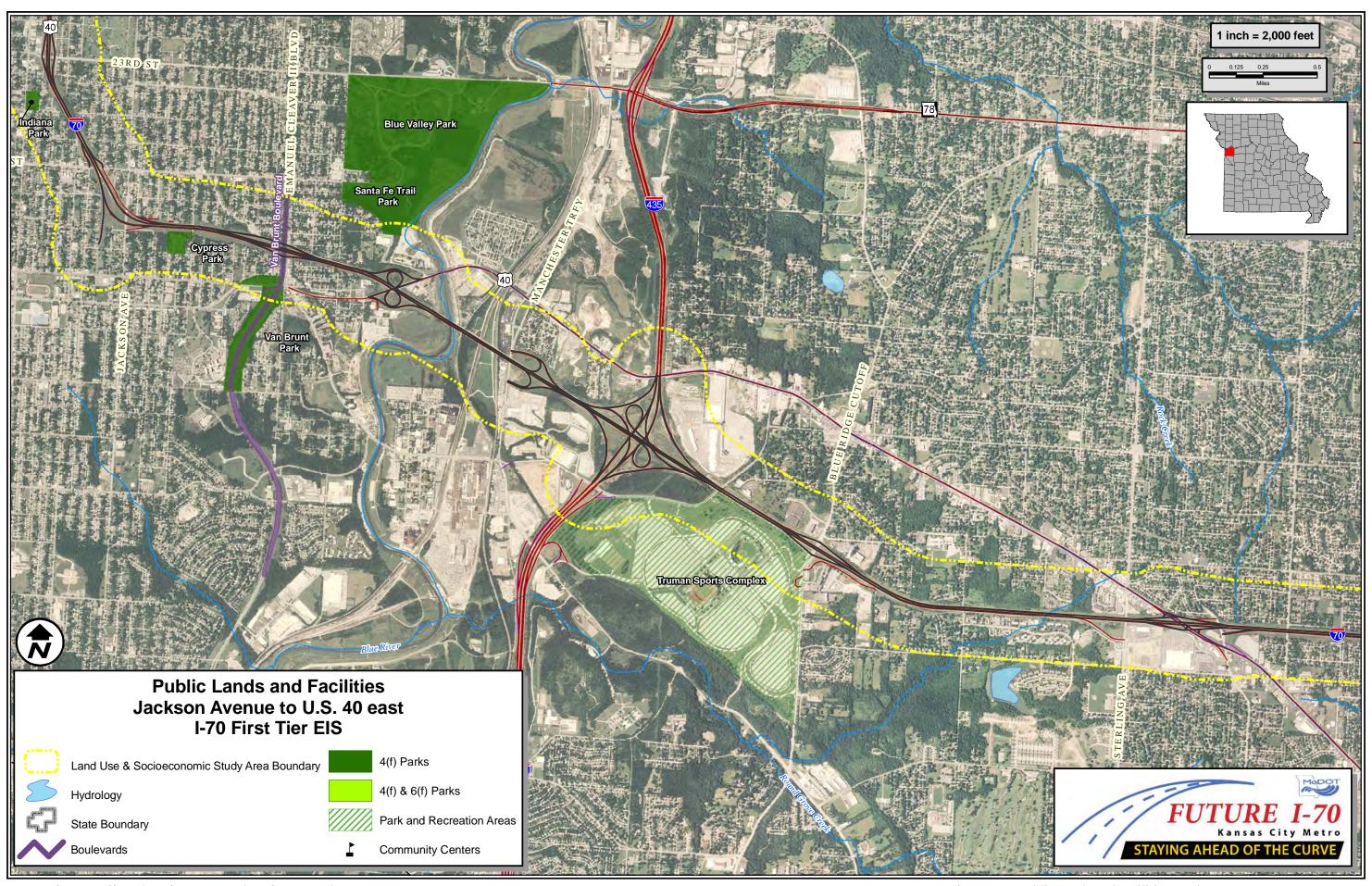
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Figure 3.3.1 Public Lands and Facilities - Overall



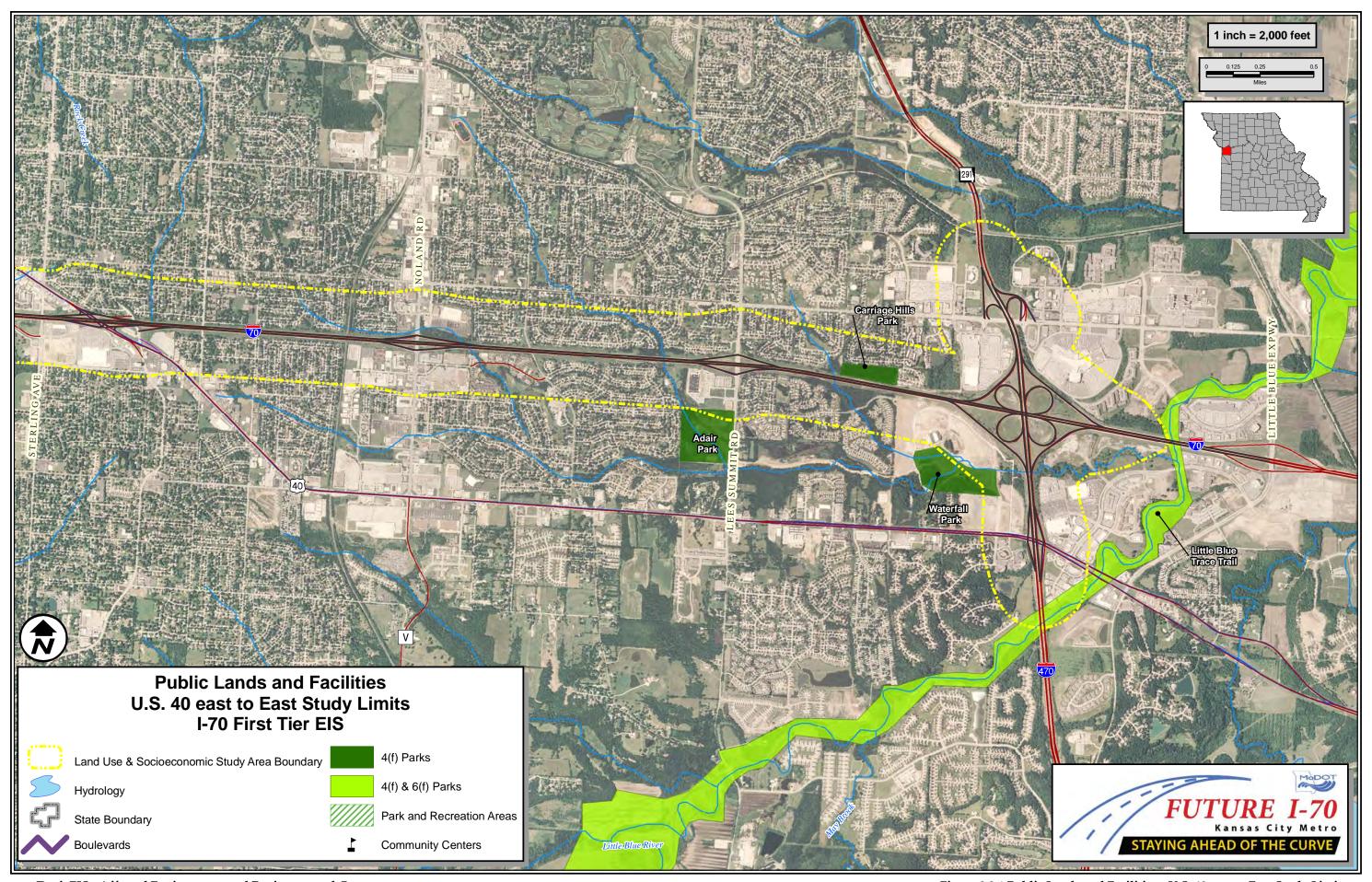
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Figure 3.3.1 Public Lands and Facilities - West Study Limits to Jackson Avenue



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Figure 3.3.1 Public Lands and Facilities - Jackson Avenue to U.S. 40 east



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Figure 3.3.1 Public Lands and Facilities - U.S. 40 east to East Study Limits

3.4 Relocations

This section discusses the relocations the proposed strategies will have in the Study Area. Relocations include residential relocations, commercial, and community facilities relocations. Residential relocations are homes that must be purchased including single-family homes, duplexes, mobile homes, apartments, and condominiums. Commercial relocations are businesses that must be purchased including stores, offices, restaurants, and industrial sites. Community facility relocations include churches, schools, colleges, community centers, and government facilities. Relocations are necessary if a Build Strategy would require enough property to necessitate the purchase of a home, business, or community facility.

Generally, assessment of potential relocations were made based on structures present during field reviews during the Summer of 2008 and the use of 2007 aerial photography. The development community is dynamic and new buildings are being constructed continuously. Since the FTEIS Build Strategies have been developed with broad footprints, the relocation counts should be considered an order of magnitude at a point in time. The numbers of relocations therefore should be used to compare the strategies and consider the order of magnitude differences. Second Tier studies will include refined strategies and relocation estimates.

What is the Current Real Estate Market in Jackson County?

In 2007 the number of residential building permits issued in Jackson County was 1942. The City of Kansas City accounted for 390 permits or 20 percent of the permits issued in Jackson County and the City of Independence accounted for 167 permits or nine percent. **Table 3.4.1** shows the residential building permits issued in 2007.



Columbus Park Older Housing



Quality Hill Condominiums



Manchester Village Mobile Home Park



Los Alamos Market y Cocina at 17th and Summit

Table 3.4.1 Residential Building Permits (2007)

	Single-Family	Multi-Family	Multi-Family	Total New
	Units	For Sale Units	Rental Units	Units
Jackson County	1414	75	453	1942
City of Kansas City	186	30	174	390
City of Independence	167	0	0	167

Source: Home Builders Association of Greater Kansas City, Residential Building Permit Statistics Jan - Dec 2007, www.kchba.com

Table 3.4.2 illustrates the number of houses for sale on the multiple listings service (MLS) operated by the National Association of Realtors, www.realtors.com. The table lists the houses for sale in the Study Area by zip code, **Figure 3.4.1** shows the locations of each zip code.

Table 3.4.2 Houses for Sale

	64101	64102	64105	64108	64106	64127	64128	64129	64133	64052	64055	64057
\$0 - \$50,000	0	0	0	3	1	86	56	14	36	27	18	0
\$50,000 -	0	0	8	6	1	24	19	30	113	112	86	10
\$100,000												
\$100,000 -	0	0	17	21	21	7	4	9	84	43	98	29
\$150,000												
\$150,000 -	0	0	32	29	16	3	0	0	29	7	47	18
\$200,000												
\$200,000 -	0	1	33	45	58	1	1	0	12	1	30	14
\$300,000												
\$300,000+	0	0	11	77	149	0	0	0	5	1	8	18
1 Bedroom or	0	0	59	49	84	18	8	0	9	15	14	4
less												
2 Bedroom	0	1	41	100	153	32	20	10	67	69	76	7
3 Bedroom	0	0	1	18	6	47	35	33	152	80	141	45
4 Bedroom	0	0	0	14	3	18	6	9	47	24	47	31
5 Bedrooms	0	0	0	0	0	6	11	1	4	3	9	2
or more												
Source: National A	Source: National Association of Realtors' Multiple Listings Service, www.realtor.com, March 2009											

As of March 2009, there are 1,629 houses for sale in the Study Area, the majority in the \$50,000 to \$100,000 price range and two or three bedrooms.

What is the Uniform Relocation and Real Property Acquisition Policies Act?

Assistance provided to those being relocated as a result of improvements to I-70 would be in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.

The Uniform Act, as well as Missouri state law, requires that just compensation be paid to the owner of private property taken for public use. The appraisal of fair market value is the basis of determining just compensation to be offered the owner for the property to be acquired.

An appraisal is defined in the Uniform Act as a written statement independently and impartially prepared by a qualified appraiser setting forth an opinion of defined value of an adequately described property as of a specific date, supported by the presentation and analysis of relevant market information.

Any displaced owner-occupant or tenant of a dwelling who qualifies as a displaced person is entitled to payment of his or her actual moving and related expenses, as the MoDOT determines to be reasonable and necessary. A displaced owner-occupant who has occupied a displacement dwelling for at least 180 days is also eligible to receive up to \$22,500 for a replacement housing payment which includes the amount by which the cost of a replacement dwelling exceeds the acquisition cost of the displacement dwelling, increased interest costs and incidental costs. A displaced owneroccupant who has occupied a displacement dwelling for at least 90 days but less than 180 days and a tenant who has occupied a displacement dwelling for at least 90 days, is entitled to a payment not to exceed \$5,250 for either a rental or down payment assistance.

Any displaced business, farm operation, or nonprofit organization which qualifies as a displaced person is entitled to payment of their actual moving and related expenses, as the MoDOT determines to be reasonable and necessary. In addition, a business, farm, or nonprofit organization may be eligible to receive a payment, not to exceed \$10,000 for

expenses incurred in reestablishing their business, farm operation, or nonprofit organization at a replacement site. A displaced business may be eligible to choose to receive a fixed payment in lieu of the payments for actual moving and related expenses, and actual reasonable reestablishment expenses. The payment amount for this entitlement alternative is based on the average net earnings of the business. This fixed payment amount cannot be less than \$1,000 or more than \$20,000.

What are the Relocations Required for Each Strategy?

The exact number of relocations required of each strategy is not known and the numbers in this document are estimates. The relocation analysis is based on a general footprint and right of way requirements. Figures 2.3, 2.5, 2.7, and Table 2.2 at the end of Chapter 2 show these approximate footprints and estimated right of way cost.

No-Build Strategy

The No-Build Strategy will not require any relocations of residences or businesses in the Study Area.

Improve Key Bottlenecks Strategy

The Improve Key Bottlenecks Strategy will require residential, commercial, and community facility relocations. **Table 3.4.3** summarizes the potential relocations by Sub-Area. In total, the Improve Key Bottlenecks Strategy could cause the relocation of 188 residential buildings, 55 businesses, and three community facilities.

The residential relocations include not only single-family residences, but multi-family residences as well. The Improve Key Bottlenecks Strategy could cause the relocation of 18 multi-family residences with a varying number of units per building. The majority of the multi-family residential relocations are in the Suburban Sub-Area.

In addition, the majority of the commercial relocations in the Urban Sub-Area and I-435 Sub-Area are industrial facilities. The community facilities that could be relocated are the

How do I know if my property will be affected?

At this stage we don't know exactly which homes and businesses would be affected by improvements to I-70. During the Second Tier studies, the Identified Preferred Strategy alignment details will become clearer. As a result, the potential relocations will be determined.

I-70 First Tier Draft EIS Relocations Salvation Army Emergency Disaster Services Building, Vatterott College, and the MoDOT maintenance facility.

Table 3.4.3 Improve Key Bottlenecks Relocations

	Single- Family Residential	Multi-Family Residential Buildings	Commercial	Community Facilities
Downtown Sub-Area	1	4	7	0
Urban Sub-Area	50	1	19	1
I-435 Sub-Area	29	0	13	1
Suburban Sub-Area	74	12	13	1
I-470 Sub-Area	16	1	3	0
Total	170	18	55	3

Add General Lanes Strategy

The Add General Lanes Strategy will require residential, commercial, and community facility relocations to accommodate the necessary right of way requirements. There will be additional right of way required for this Strategy which will result in additional right of way needs along the corridor. **Table 3.4.4** summarizes the potential relocations by Sub-Area. In total the Add General Lanes Strategy could cause the relocation of 303 residential buildings, 93 businesses, and 11 community facilities.

The residential relocations include not only single-family residences, but multi-family residences as well. The Add General Lanes Strategy could cause the relocation of 32 multi-family residences with a varying number of units per building. The majority of the multi-family residential relocations are in the Urban and the Suburban Sub-Areas.

Table 3.4.4 Add General Lanes Relocations

	Single- Family Residential	Multi-Family Residential Buildings	Commercial	Community Facilities
Downtown Sub-Area	5	4	21	3
Urban Sub-Area	90	14	31	5
I-435 Sub-Area	28	0	13	2
Suburban Sub-Area	110	13	25	1
I-470 Sub-Area	38	1	3	0
Total	271	32	93	11

In addition, the majority of the commercial relocations in the Urban Sub-Area and the I-435 Sub-Area are industrial facilities. The community facilities that could be relocated are the Federal Bureau of Investigations Building, Kansas City Community Center, the Salvation Army Emergency Disaster Services Building, four churches, the former Kansas City Missouri Police Training Facility, Vatterott College, and a MoDOT maintenance facility.

Transportation Improvement Corridor Strategy

The Transportation Improvement Corridor Strategy will require residential, commercial, and community facility relocations to accommodate the necessary right of way requirements. There will be additional right of way required for this Strategy which will result in additional right of way needs along the corridor. **Table 3.4.5** summarizes the potential relocations by Sub-Area. In total the Transportation Improvement Corridor Strategy could cause the relocation of 444 residential buildings, 111 businesses, and 12 community facilities.

The residential relocations include not only single-family residences, but multi-family residences as well. The Transportation Improvement Corridor Strategy could cause the relocation of 45 multi-family residences with a varying number of units per building. The majority of the multi-family relocations are located in the Urban Sub-Area.

In addition, the majority of the commercial relocations in the Urban Sub-Area and the I-435 Sub-Area are industrial facilities. The community facilities that could be relocated are seven churches, the City Union Mission Family Center, the Salvation Army Emergency Disaster Services Building, the former Kansas City Missouri Police Training Facility, Vatterott College, and a MoDOT maintenance facility.

Table 3.4.5 Transportation Improvement Corridor Relocations

	Single-	Multi-Family		
	Family	Residential		Community
	Residential	Buildings	Commercial	Facilities
Downtown Sub-Area	1	4	8	1
Urban Sub-Area	159	24	47	9
I-435 Sub-Area	31	0	15	1
Suburban Sub-Area	170	16	38	1
I-470 Sub-Area	38	1	3	0
Total	399	45	111	12

<u>Identified Preferred Strategy</u>

The Identified Preferred Strategy would require residential, commercial, and community facility relocations. **Table 3.4.6** summarizes the potential relocations by Sub-Area. The relocation analysis used the wider strategy footprint between east of I-435 and I-470. In total, the Identified Preferred Strategy could cause the relocation of 247 residential buildings, 67 businesses, and four community facilities.

The residential relocations include not only single-family residences, but multi-family residences as well. The Identified Preferred Strategy could cause the relocation of 19 multi-family residences with a varying number of units per building. The majority of the multi-family residential relocations are in the Suburban Sub-Area.

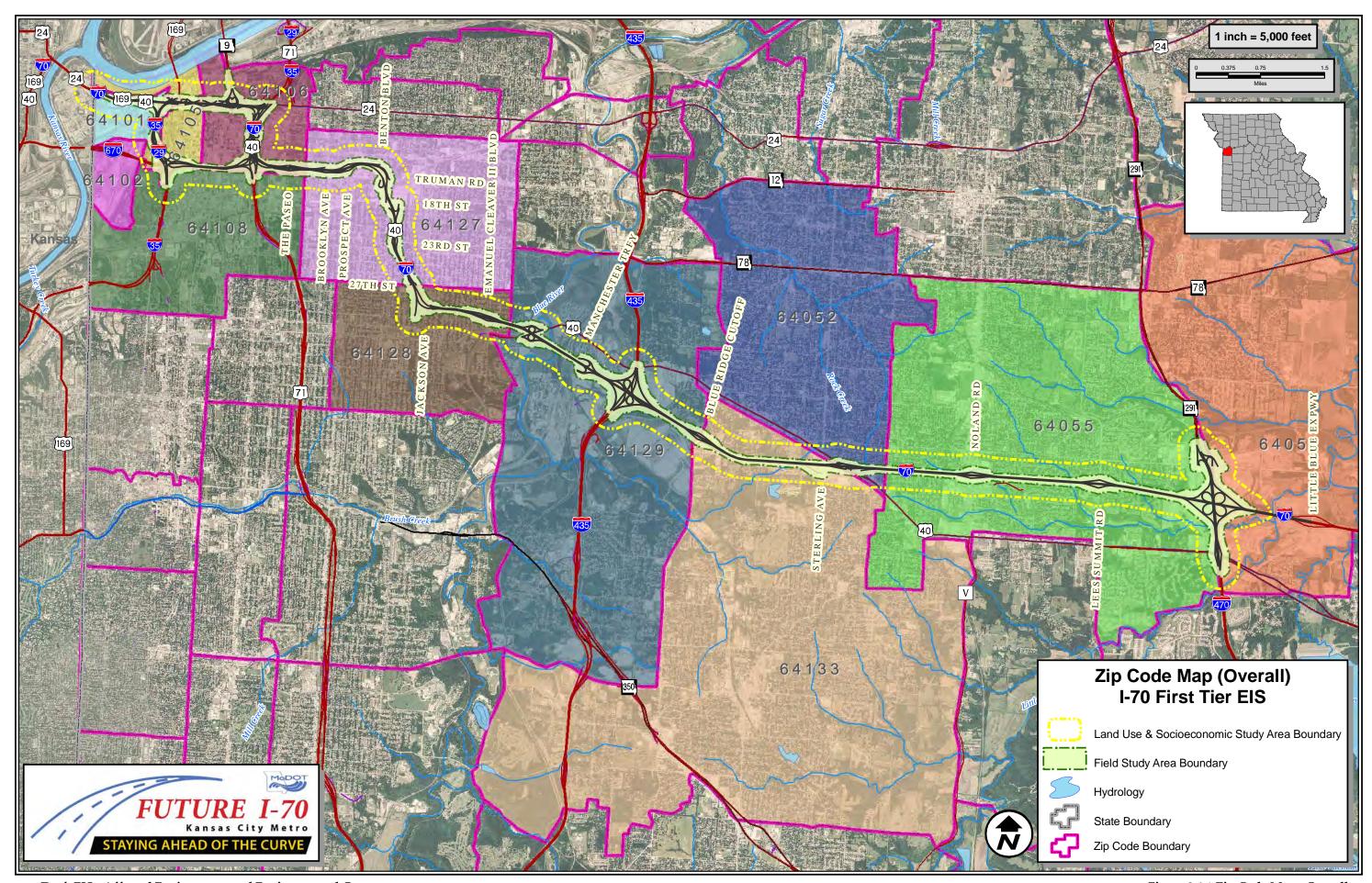
The majority of the commercial relocations in the Urban Sub-Area and I-435 Sub-Area are industrial facilities. The community facilities that may be relocated are the Salvation Army Disaster Services Warehouse Building, Vatterott College, and a MoDOT maintenance facility.

Table 3.4.6 Identified Preferred Strategy Relocations (Based on widest potential footprint)

	Single- Family Residential	Multi-Family Residential Buildings	Commercial	Community Facilities
Downtown Sub-Area	1	4	7	0
Urban Sub-Area	50	1	19	1
I-435 Sub-Area	29	0	13	2
Suburban Sub-Area	110	13	25	1
I-470 Sub-Area	38	1	3	0
Total	228	19	67	4

How Will Relocations Be Assessed in the Second Tier Studies?

The Second Tier studies will further evaluate and refine the potential relocations that the Selected Strategy will create. The more detailed engineering design for the Second Tier studies will allow the Study Team to identify specific properties that may require relocation with much more precision. The Second Tier studies will also discuss the relocation process in more detail. As a part of the Second Tier studies, the footprint for the Selected Strategy will be refined to avoid relocations where possible and minimize the number of relocations needed.



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Figure 3.4.1 Zip Code Map - Overall

3.5 Environmental Justice

This section discusses the potential adverse human health or environmental effects the proposed strategies may have on minority and low-income populations including those covered by the Executive Order on Environmental Justice, Title VI, Title VIII, and The Americans with Disabilities Act (ADA).

What is the Environmental Justice?

In early transportation projects, many of the impacts affected minority and/or low-income populations in greater ways than other populations. This has been partly attributed to these populations and neighborhoods being located near downtowns which were the target of transportation projects. Typically, these neighborhoods are perceived to lack political power and representation. As a result minority and low-income populations and neighborhoods were impacted more often than other populations and neighborhoods.

Environmental Justice regulations were established to address disproportionately high and adverse human health or environmental effects that projects funded by the federal government may have on minority and low-income populations. The Environmental Justice requirements were established by Executive Order 12898 entitled "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" in 1994. mandates that federal agencies identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of proposed projects on minority and low-income populations. Environmental Justice builds on Title VI of the Civil Rights Act of 1964 which declares that discrimination on the basis of race, color, or national origin shall not occur in connection with programs and activities receiving federal funding assistance. Environmental Justice has three guiding principles:

 Avoid, minimize, or mitigate disproportionately high and adverse human health and environmental impacts,

Title VI of the Civil Rights Act of 1964:

Title VI prohibits discrimination on the basis of race, color, and national origin in programs and activities receiving federal financial assistance.

Title VIII of the Civil Rights Act of 1968:

Title VIII (Fair Housing Act) prohibits discrimination in the sale, rental, and financing of dwellings based on race, color, religion, sex, or national origin.

Americans with Disabilities Act (ADA) of 1990:

ADA prohibits discrimination based on disability.

Disproportionately High Defined:

The adverse effect is predominately felt by minority and/or low-income populations or the adverse effect is noticeably more severe or greater in magnitude than the adverse effect that will be suffered by non-minority and/or non-low-income populations.

Environmental Justice Populations Defined:

Those populations that are minority and/or low-income.

Minority Populations Defined:

Those persons who are Black, Hispanic, Asian American, American Indian, or Alaskan Native.

Low-Income Populations Defined:

Those households with a total income at or below the U.S. Department of Health and Human Services poverty guidelines of \$21,200 (in 2008) for a family of four.

- including social and economic effects on minority and low-income populations.
- Ensure full and fair participation by all potentially affected communities in the decision-making process.
- Prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

What Groups are Included in Environmental Justice Analysis?

For the analysis of Environmental Justice, minority populations are defined as any person who is Black, Hispanic, Asian American, American Indian, or Alaskan Native. Lowincome populations are defined as those households with a total income at or below the U.S. Department of Health and Human Services poverty guidelines of \$21,200 (in 2008) for a family of four. The guideline was \$17,030 for a family of four at the time of the 2000 Census. Whether or not they fit the definition of an Environmental Justice population, all groups and individuals have the right to access and participate in the transportation decision-making process as protected by Title VI of the Civil Rights Act.

How Did The Study Team Involve Environmental Justice Populations?

Both Federal and State Environmental Justice policies stress that early and ongoing public outreach is a vital component of the Environmental Justice process. The Study Team held two rounds of public outreach prior to the publication of this DEIS. Public meetings or listening posts allow members of the public to speak one to one with the Study Team. All meetings were held in an open house format over two to three hours and members of the public could stop by at any time during the meetings. The first round of public outreach was held during September 2008, which included two weekday evening public open houses and two Saturday morning public coffee and open houses. The September 2008 public outreach was held at the following locations.

St. Paul's School of Theology, Holter Center Cafeteria,
 5123 E. Truman Road, Kansas City

- Truman High School, 3301 S. Noland Road, Independence
- Central High School, 3221 Indiana Avenue, Kansas City
- Don Bosco Senior Center, 580 Campbell Street, Kansas City

The Study Team encouraged the public to comment on the study at all meetings. Prior to the public outreach activities, newsletters and/or postcards were sent to homes and businesses near the corridor including all minority and lower income households. Both the newsletters and the postcards were translated into Spanish and Vietnamese. In addition, flyers were mailed to umbrella organizations, agencies, businesses, and public officials. Media releases were sent by MoDOT to local media outlets in the Kansas City area. All locations were ADA accessible with public transit access, enhancing the opportunity for lower income citizens or people who do not own automobiles to attend.

The Study Team revised their approach for the second round of public outreach in order to increase public participation. The second round of public outreach was held in January 2009, which included one online public meeting and one open house public meeting. The open house public meeting was held at St. Paul's School of Theology. The details of the open house public meeting and on-line meeting were posted on the Kansas City Scout electronic variable message signs along the corridor. **Chapter 4** discusses the public outreach efforts in more detail.

Low-income, minority, and other community members will have further chances to comment on the study through a well advertised public hearing process and public comment period during the review process of this FTEIS.

What Minority and Low-Income Populations are in the Study Area?

Based on the demographic profile of the Study Area discussed in **Section 3.2**, the Study Team conducted an analysis to identify Environmental Justice populations using U.S. Census data. U.S. Census Bureau Census 2000 block group and block level data was used as the primary data source for the Environmental Justice analyses.

An evaluation of population characteristics indicates that there are Environmental Justice populations living within the Study Area. The ethnicity/race characteristics are shown in **Table 3.5.1** and the income levels and poverty status profiles are shown in **Table 3.5.2**

Table 3.5.1 Ethnicity/Race Assessment

	Study Area	Jackson County	Missouri		
Total Persons	57,590	654,880	5,595,211		
Total Minority Population as a Percent					
of All Persons	44.2%	32.30%	16.20%		
White Population (Non-Hispanic) as a					
Percent of All Persons	55.8%	67.70%	83.80%		
African American Population (Non-					
Hispanic) as a Percent of All Persons	32.3%	22.80%	11.10%		
American Indian Population (Non-					
Hispanic) as a Percent of All Persons	0.4%	0.50%	0.40%		
Asian Population (Non-Hispanic) as a					
Percent of All Persons	1.9%	1.30%	1.10%		
Native Hawaiian Population (Non-					
Hispanic) as a Percent of All Persons	0.3%	0.10%	0.10%		
Hispanic Population (all races) as a					
Percent of All Persons	7.1%	5.30%	2.10%		
Other Race Alone as a Percent of All					
Persons	0.0%	0.30%	0.10%		
Two or More Races as a Percent of All					
Persons	2.2%	2.10%	1.40%		
Source: U.S. Census Bureau, Census 2000. Study Area data is for the Census Block Groups.					

Table 3.5.2 Income Levels and Distribution

	Study Area	Jackson	Missouri
		County	
Median Household Income	\$28,467	\$39,277	\$37,934
Per Capita Income	\$16,567	\$20,788	\$19,936
Individuals Below Poverty			
Level ¹	17.80%	11.90%	11.70%

Source: U.S. Census Bureau, Census 2000. Study Area data is the Census Block Groups. ¹Based on the poverty guideline for the year 2000.

The percent of minorities living in the Study Area is approximately 40 percent. **Figure 3.5.1** at the end of this chapter shows the percent of the population that is minority by block group. **Figure 3.5.1** indicates that the highest concentration of minorities living in the Study Area is from the eastside of the downtown loop to approximately U.S. 40; over 60 percent of the population in this area is part of a minority group. The data shows a difference in the makeup of the population in the western portion of the Study Area in Kansas City, Missouri compared to the eastern portion of the Study Area in Independence, Missouri. Generally, as one travels from downtown Kansas City, Missouri in the west to Independence, Missouri in the east the percent of minorities living in the Study Area decreases.

The U.S. Census Bureau defines a substantial low-income population as an area where 20 percent or more residents have an annual income below the poverty level. Median income for the Study Area is \$31,714. Per capita income for the I-70 Study Area is \$16,766. According to Census 2000 data, 19 percent of families in the Study Area were below the poverty level, while this is not a substantial low-income population by definition it does indicate that a large low-income population is present in the Study Area. **Figure 3.5.2** at the end of this chapter shows the percent of the population that is low income by block group. The analysis identified 21 block groups with substantial low income populations.

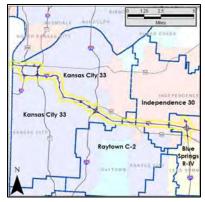
The Study Team also analyzed data from Mid-America Regional Council's Metro Dataline, <u>www.metrodataline.org</u>. This data provides an estimate of children five to 17 years of age in poverty by school district for 1995, 1997, and 1999 to

What is a Micropolitan Statistical Area?

An urban area with a population of least 10,000 persons, but less than 50,000 persons.

What counties are in the Kansas City Metropolitan Statistical Area?

The 15 counties in the Kansas City MSA are: Clinton, Caldwell, Platte, Clay, Ray, Jackson, Lafayette, Cass, and Bates in Missouri and Leavenworth, Wyandotte, Johnson, Franklin, Miami, and Linn in Kansas.



School District Boundaries

2005. Estimates are included for the 15 counties in the Kansas City Metropolitan Statistical Area (MSA) (four counties were added in 2003), the two counties in the Micropolitan Statistical Areas (Atchison, Kansas and Warrensburg, Missouri) that added to the Kansas City MSA, form the new Combined Statistical Area (CSA) of Kansas City-Overland Park-Kansas City, and Douglas County, Kansas.

The Study Team looked at the data for the four school districts that serve the Study Area; Kansas City 33, Raytown C-2, Independence 30, and Blue Springs R-IV. According to the data, the Kansas City 33 School District had the largest percentage of children in poverty in 2005 at approximately 28 percent when comparing the four districts. Independence 30 and Raytown C-2 had approximately 14 percent and Blue Springs R-IV had approximately eight percent. Historically, all four school districts have seen increases in the percent of children in families in poverty at varying rates since 2000, except Kansas City 33. Kansas City 33 experienced a decrease in the percent of children in families in poverty from 2004 to 2005.

Prior to 2000, the percent of children in families in poverty had been decreasing, except from 1997 to 1999. From 1997 to 1999 the Raytown C-2 and the Blue Springs R-IV school districts saw an increase in the percent of children in families in poverty. **Figure 3.5.3** shows the percentage of children in families in poverty for each of the four school districts for the available years.

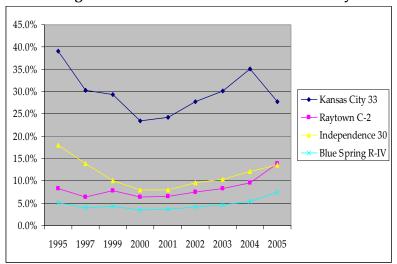


Figure 3.5.3 Children in Families in Poverty

What are the Effects of Each Strategy on Environmental Justice Populations?

Potential Environmental Justice effects are defined as disproportionately high and adverse human health or environmental effects of proposed projects on minority and low-income populations.

No-Build Strategy

The No-Build Strategy will have minimal adverse affects on segments of the population including minorities and low-income persons. The primary effects would likely be ongoing congestion throughout the corridor along with associated noise and air quality issues as discussed in other sections of this document.

Improve Key Bottlenecks Strategy

The Improve Key Bottlenecks Strategy may have adverse affect on minorities and low-income persons living near key bottlenecks. The potential impacts will be dependent on the improvements needed at each bottleneck. If an interchange requires ramps to be lengthened, there may be no impact to the surrounding population. If modifications to interchanges are required there will be impacts to the surrounding populations.

The key bottlenecks most likely to have an adverse affect on minorities and low-income persons are those in the Urban Sub-Area. This Sub-Area has some of the highest concentrations of minorities and low-income persons living in the Study Area and two of the worst bottlenecks, the Benton and Jackson curves are located in this Sub-Area. **Figure 3.5.1** and **Figure 3.5.2** show the percent of minorities and low-income persons by 2000 Census Block Group for the Study Area.

The population living in the block group adjacent to the Benton curve is 60 to 80 percent minorities and 20 to 40 percent of the population is below the poverty line. The population living in the block groups adjacent to the Jackson Curve is 60 to over 80 percent minorities and 20 to 60 percent is below the poverty line. The most likely impacts in the Urban Sub-Area are relocations and increased noise, discussed further in **Section 3.4 Relocations** and **Section 3.10 Noise**.

Add General Lanes Strategy

The Add General Lanes Strategy will have adverse affect on minorities and low-income persons living along the corridor. Like the Fix Key Bottlenecks Strategy the most likely impacts to minorities and low-income persons are in the Urban Sub-Area. There will be additional right of way required for this strategy which will result in adverse impacts to all populations including minorities and low-income populations in the Study Area. The most likely impacts to Environmental Justice populations would be in the Urban Sub-Area are relocations and increased noise, discussed further in **Section 3.4 Relocations** and **Section 3.10 Noise**.

Transportation Improvement Corridor Strategy

The Transportation Improvement Corridor Strategy will have adverse affect on minorities and low-income persons living along the corridor. Like the other Build Strategies the most likely impacts to minorities and low-income persons are in the Urban Sub-Area. There will be additional right of way required for this strategy which will result in adverse impacts to the all populations including minorities and low-income

populations along the corridor. The most likely impacts to Environmental Justice populations would be in the Urban Sub-Area are relocations and increased noise, discussed further in Section 3.4 Relocations and Section 3.10 Noise.

Identified Preferred Strategy

The Identified Preferred Strategy may have adverse affect on minorities and low-income persons living near key bottlenecks west of I-435. The potential impacts will be dependent on the improvements needed at each bottleneck. If modifications to interchanges are required there will be impacts to the surrounding populations.

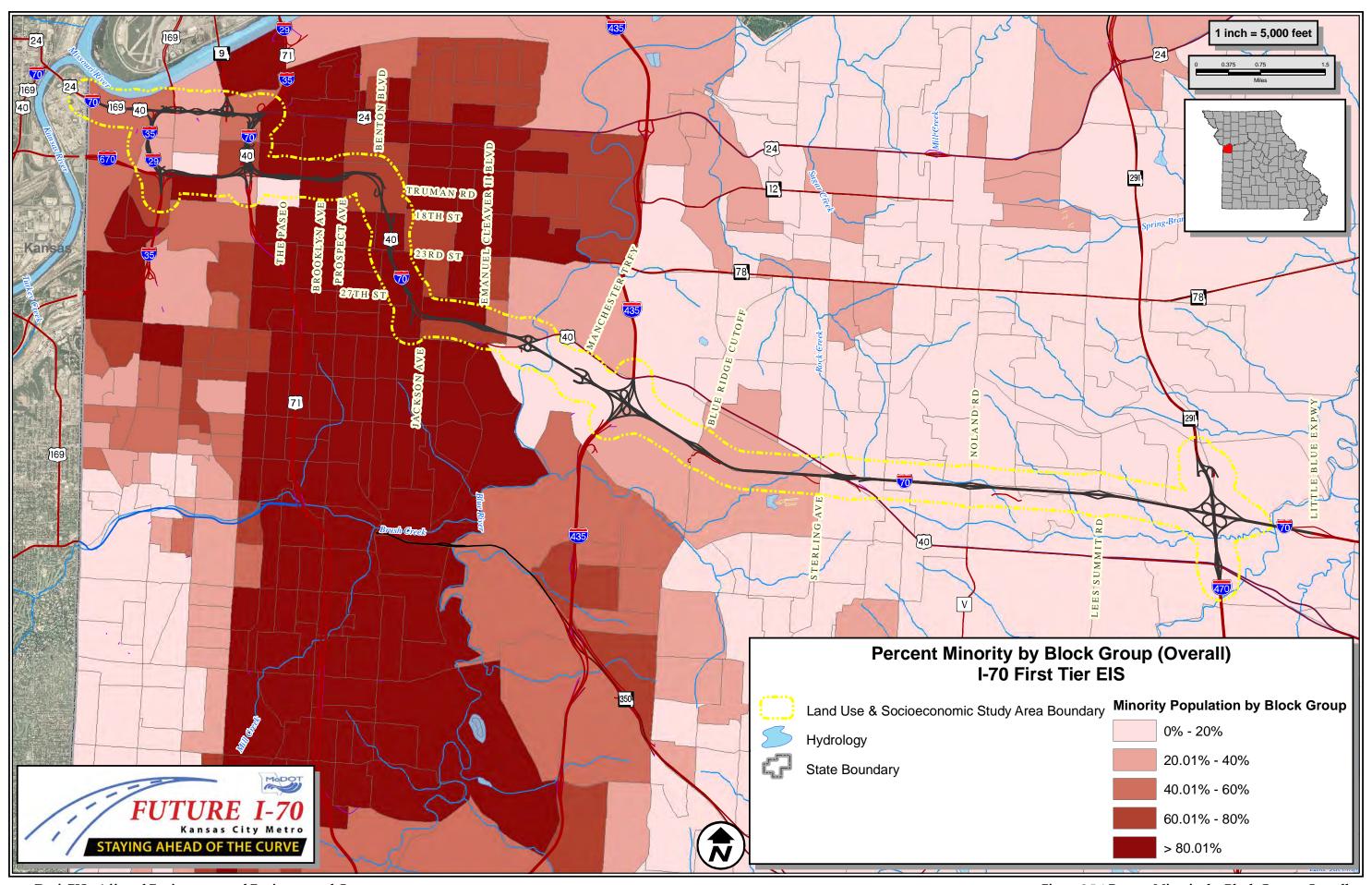
The key bottleneck locations most likely to adversely affect minorities and low-income persons are those in the Urban Sub-Area. This Sub-Area has the highest concentrations of minorities and low-income persons living in the Study Area and two of the worst bottlenecks, the Benton Curve and the Jackson Curve, are located in this Sub-Area. **Figure 3.5.1** and **Figure 3.5.2** shows the percent of minorities and low-income persons by 2000 Census Block Group for the Study Area.

The population living in the block group adjacent to the Benton curve is 60 to 80 percent minorities and 20 to 40 percent of the population is below the poverty line. The population living in the block groups adjacent to the Jackson Curve is 60 to over 80 percent minorities and 20 to 60 percent is below the poverty line. The most likely impacts in the Urban Sub-Area are relocations and increased noise, discussed further in **Section 3.4 Relocations** and **Section 3.10 Noise**.

How Will Analysis of Environmental Justice Proceed Into The Second Tier Studies?

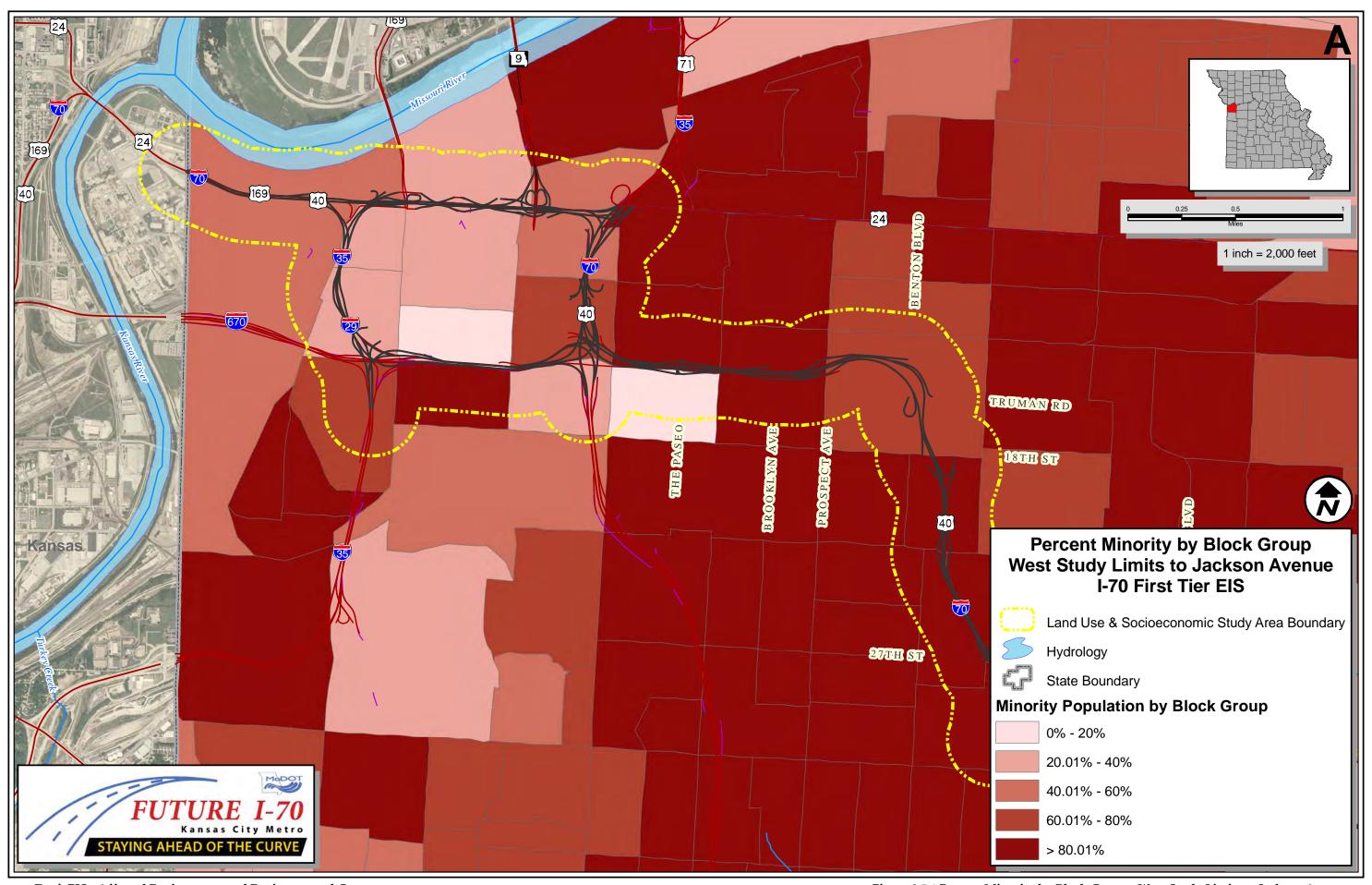
The Second Tier studies will further evaluate and refine the impacts that the Selected Strategy will cause to Environmental Justice populations, including those protected under the Executive Order on Environmental Justice, Title VI, Title VIII, and the ADA. As a part of the Second Tier studies the strategy and its footprint will be refined. The Second Tier studies will make a final determination if there are potential

disproportionate and adverse affects on minority and/or low income populations. In addition, appropriate mitigation measures will be evaluated for disproportionate impacts on minorities and/or low-income persons living in the Study Area. Close attention will need to be paid to addressing potential impacts to Environmental Justice populations as part of all of the Second Tier studies, but especially those in the Urban Sub-Area.



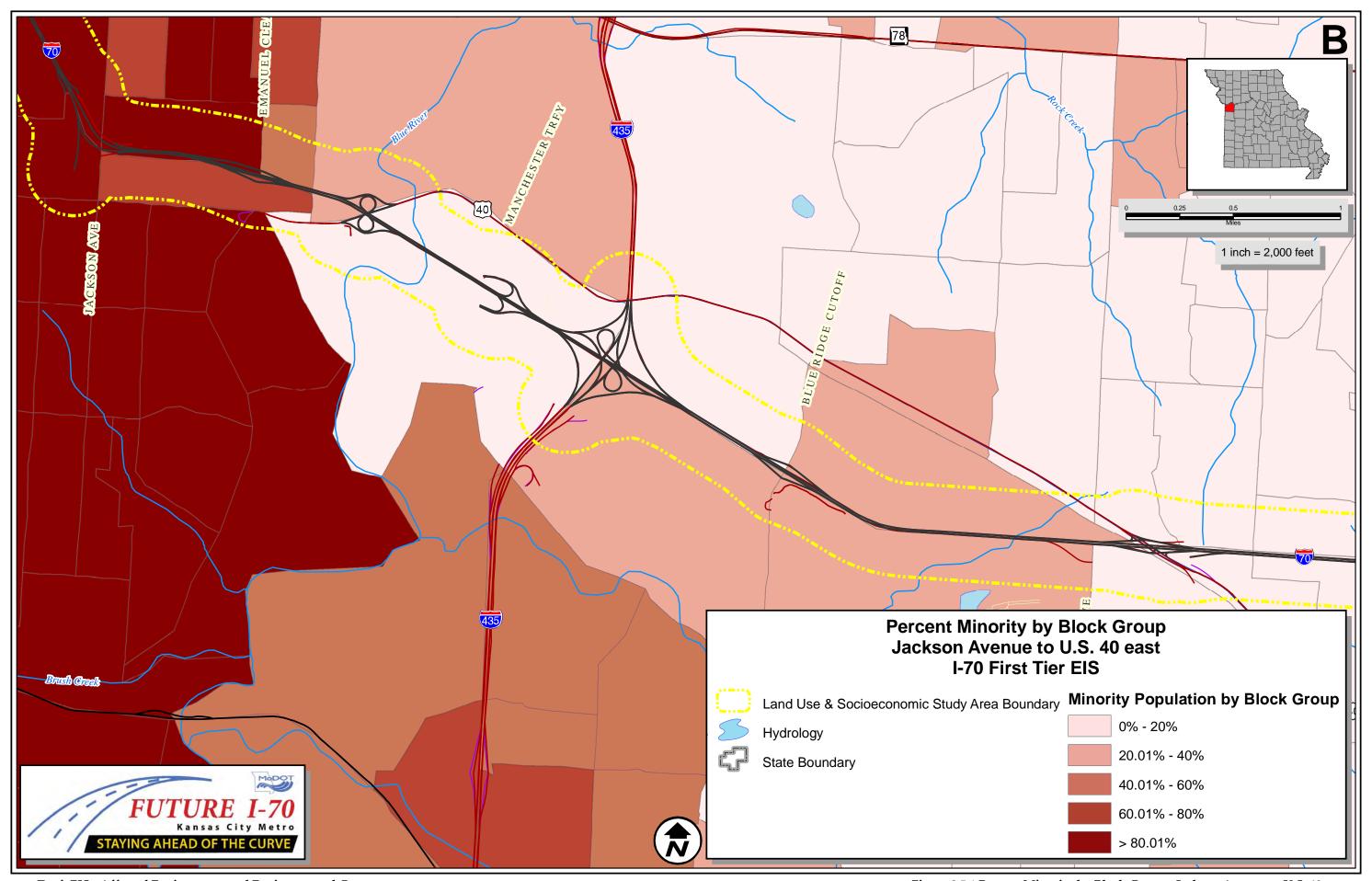
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Figure 3.5.1 Percent Minority by Block Group - Overall



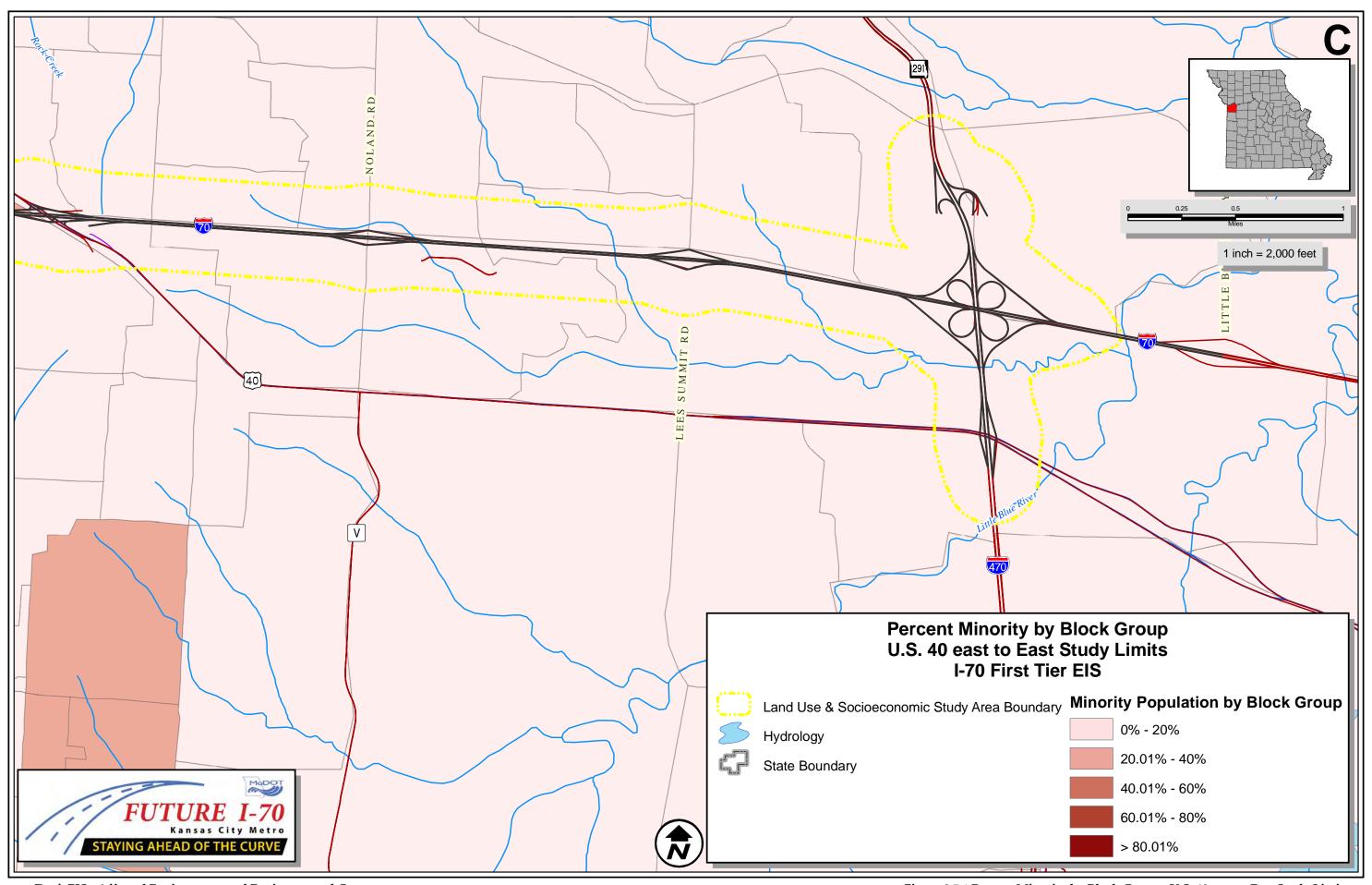
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Figure 3.5.1 Percent Minority by Block Group - West Study Limits to Jackson Avenue



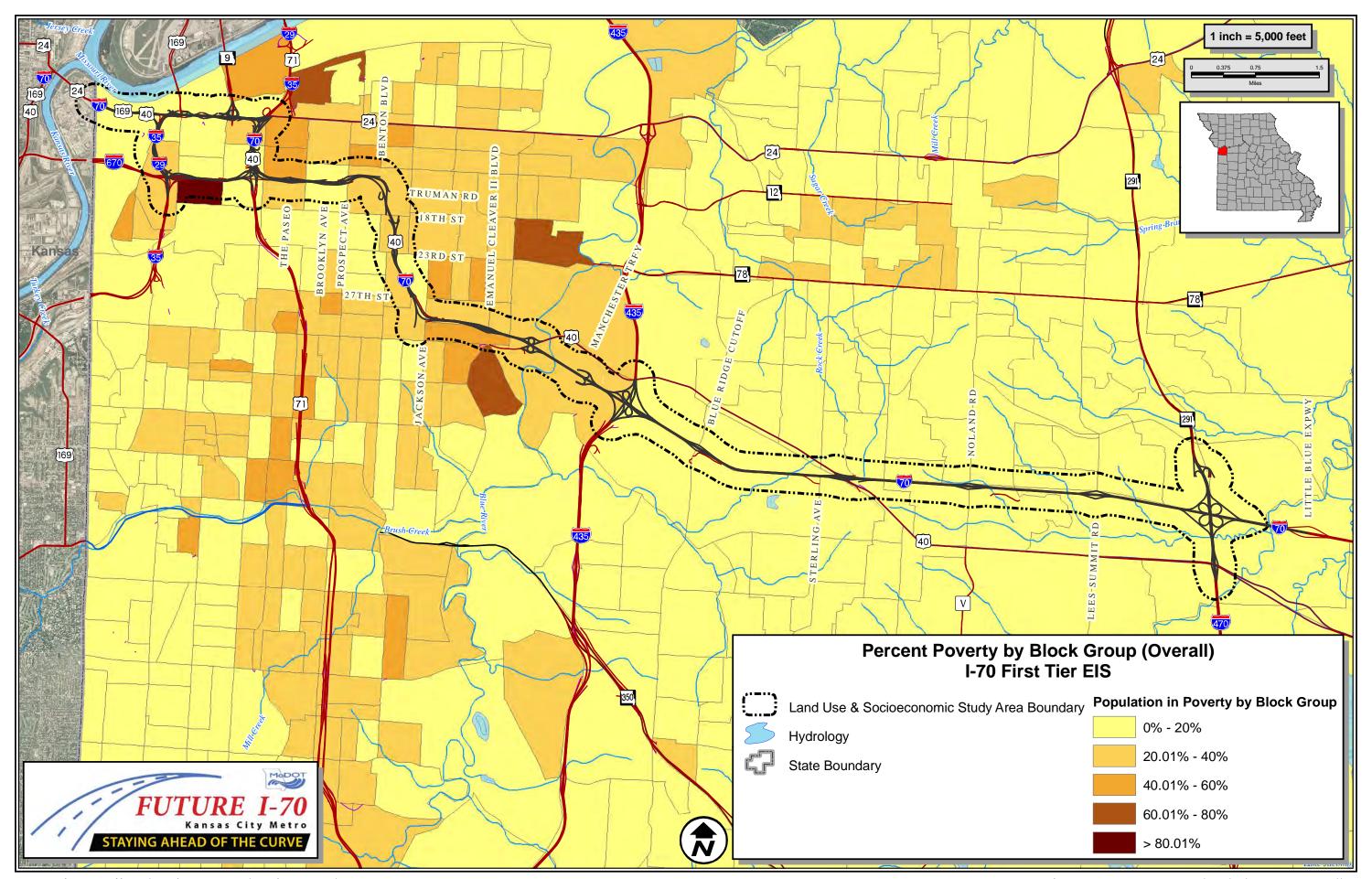
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Figure 3.5.1 Percent Minority by Block Group - Jackson Avenue to U.S. 40 east



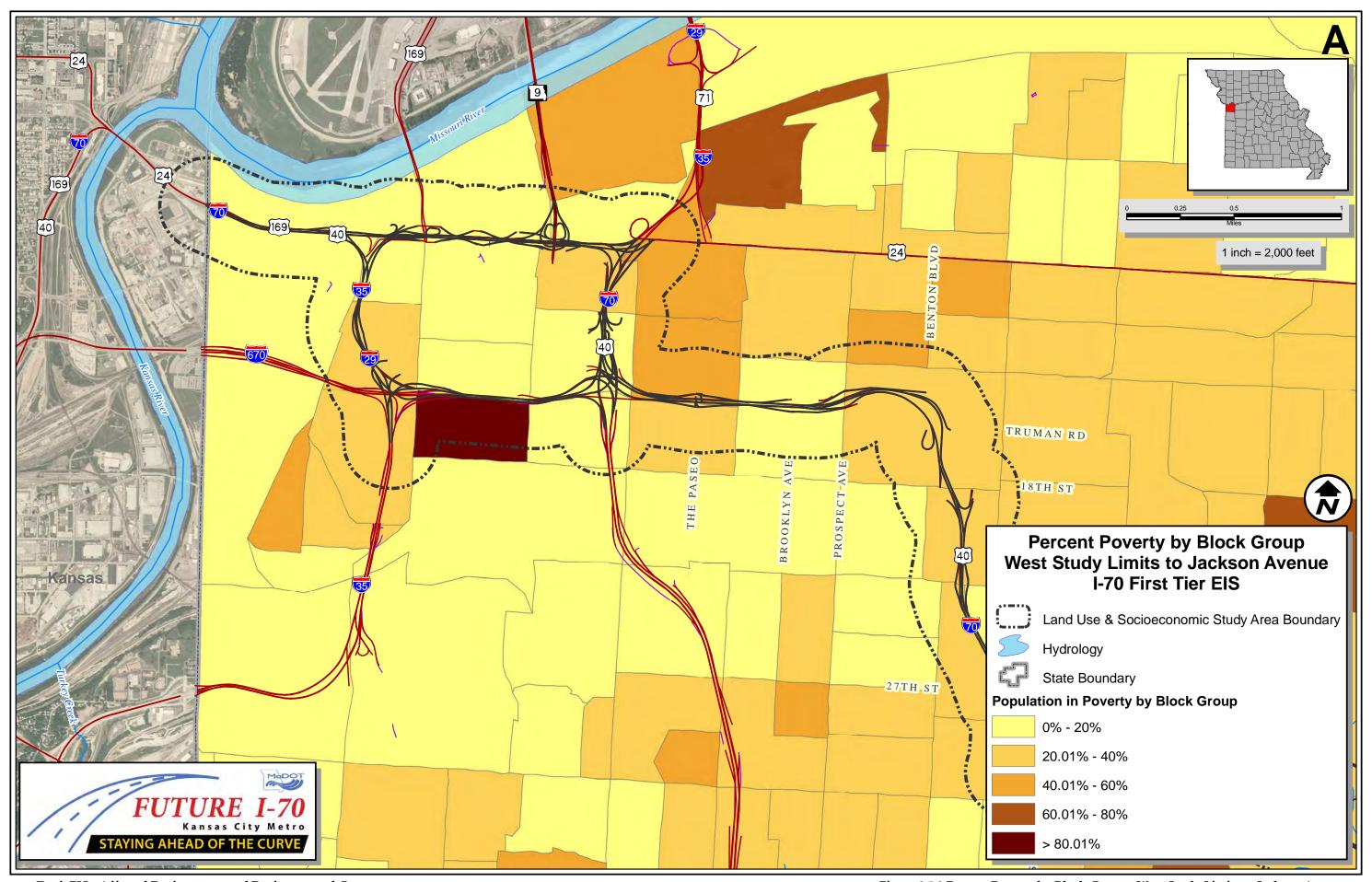
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Figure 3.5.1 Percent Minority by Block Group - U.S. 40 east to East Study Limits



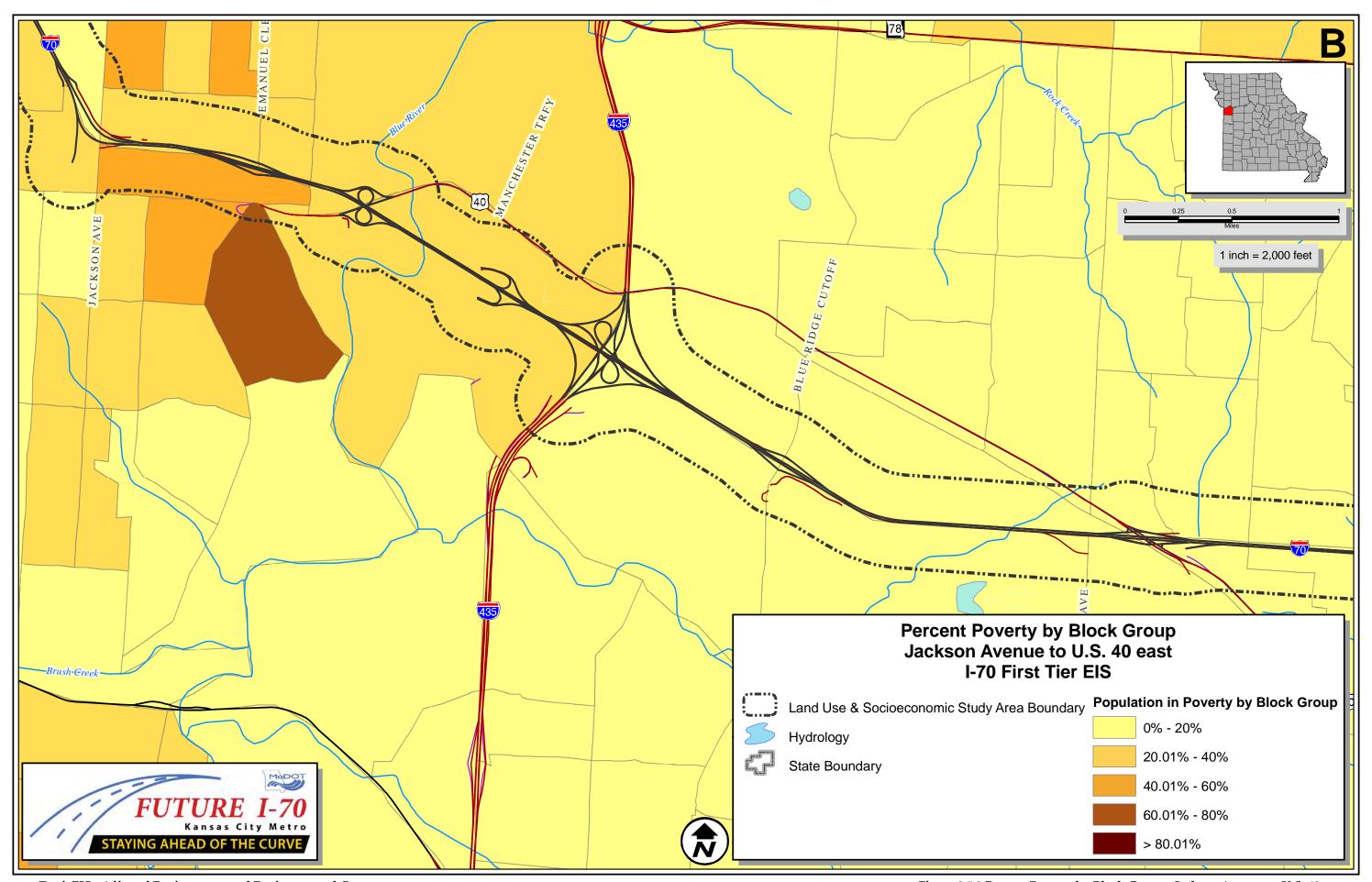
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Figure 3.5.2 Percent Poverty by Block Group - Overall



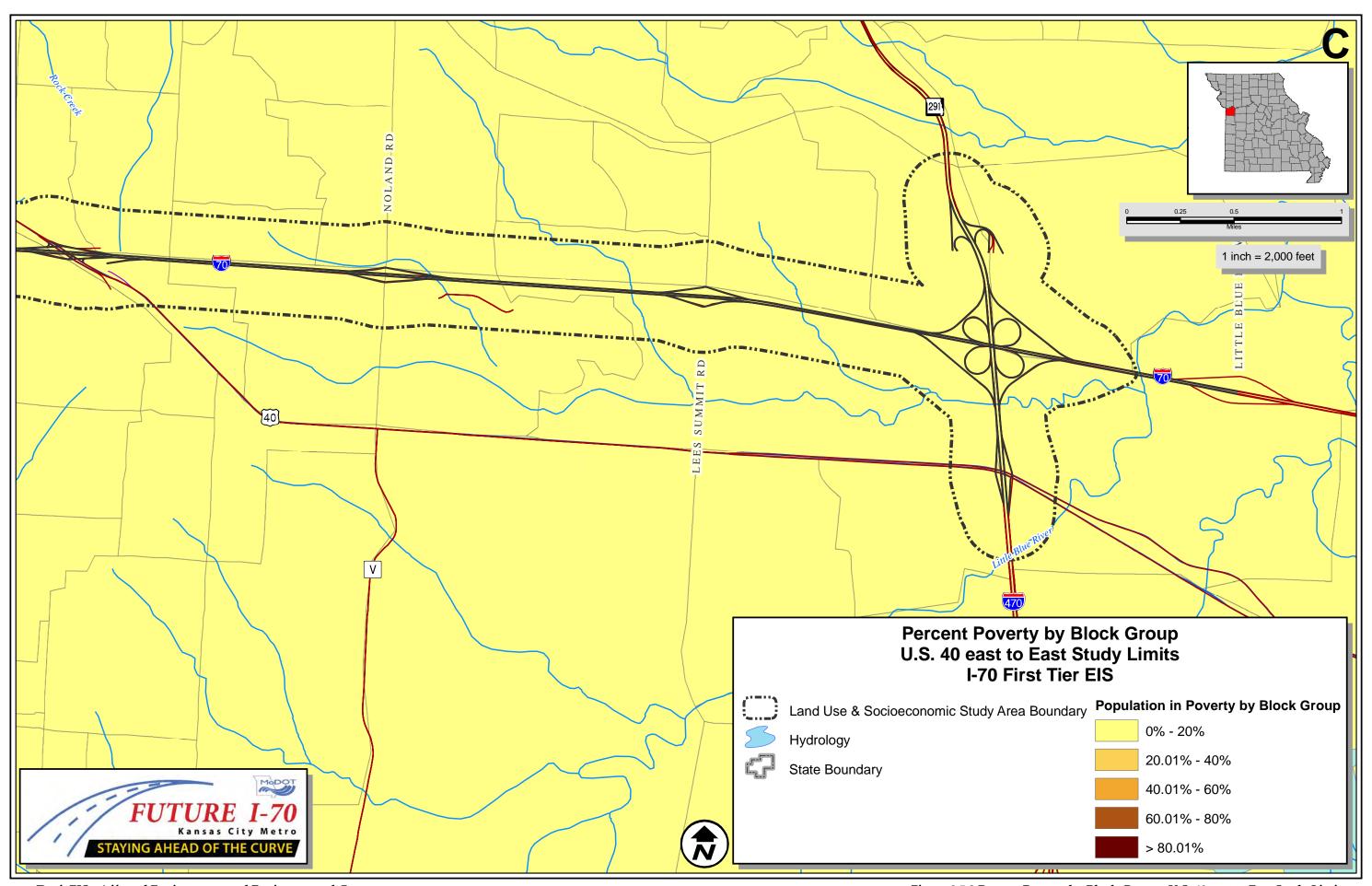
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Figure 3.5.2 Percent Poverty by Block Group - West Study Limits to Jackson Avenue



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Figure 3.5.2 Percent Poverty by Block Group - Jackson Avenue to U.S. 40 east



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Figure 3.5.2 Percent Poverty by Block Group - U.S. 40 east to East Study Limits

3.6 Economics

This section discusses the effects of proposed I-70 improvements on businesses, jobs, taxes, and freight movements.

What are the Economic Characteristics of People Who Live in the Study Area?

The population of the Study Area has lower average income levels and a greater percentage of people and families in poverty than the overall populations of the City of Kansas City, City of Independence and Jackson County. **Table 3.2.2** and **Figures 3.2.3** and **3.2.4**, located in **Section 3.2 Community and Neighborhood Effects**, provide more detail on the economic characteristics of people who live in the Study Area.

There is no current data available on the level of employment in the Study Area. With the current economic downturn, unemployment rates have been rising throughout the Kansas City area. **Table 3.6.1** shows employment and unemployment information for February 2009 for the jurisdictions in the Study Area.

Table 3.6.1 Local Area Unemployment and Employment Information

			-	Unemployment
	Labor Force	Employed	Unemployed	Rate
Jackson County	334,815	302,383	31,841	9.5%
City of Kansas City	236,658	210,853	25,805	10.9%
City of Independence	58,382	53,172	5,210	8.9%

Source: Missouri Local Area Unemployment Statistics (LAUS) from Missouri Economic Research and Information Center (MERIC) in cooperation with U.S. Department of Labor, Bureau of Labor Statistics (February 2009).

Unemployment for the jurisdictions in the Study Area has risen between three and four percent between February 2008 and February 2009. Given the lower average income levels and higher percentage of people who live in poverty in the Study Area, it is reasonable to assume that the unemployment rate in the Study Area is higher than the rates shown in the table above.

What Types of Businesses are Located in the Study Area?

The Study Area features very diverse business activity including:

- Major commercial office towers
- Medium and light industrial facilities
- Local and chain restaurants
- Strip malls and big box stores
- Small business locations
- Hotels and motels
- A variety of service businesses such as gas stations, auto repair, hair stylists, and small professional offices

The following paragraphs discuss the typical businesses found in each of the five Sub-Areas of the Study Area.

<u>Downtown Sub-Area</u>

The Downtown Sub-Area includes the central business district for Kansas City including several office towers and complexes. The area also includes commercial entertainment/restaurant districts associated with the River Market and the Sprint Center/Power and Light District. There are a number of industrial properties located next to I-70 near the western end of the Study Area and on the east side of the downtown loop. Other business uses in the Downtown Sub-Area include small to medium size retail and wholesale businesses.

<u>Urban Sub-Area</u>

Business uses in the Urban Sub-Area include smaller retail and industrial facilities. The retail facilities include local stores in small plazas, gas stations, restaurants, and service businesses including auto repair, dry cleaning, and hair and nail salons. These retail businesses tend to be scattered among neighborhood and industrial land uses. The industrial facilities include a variety of small scale manufacturing such as plating, printing, cabinets, furniture, dairy, bakery, and metal works. One large facility adjacent to I-70 at the Benton curve is a United States Post Office distribution facility.



Oppenstein Brothers Park in **Downtown**



U.S. Postal Distribution Center

3.6-2**Economics**

I-435 Sub-Area

The I-435 Sub-Area features a mix of transportation industry uses and hotels/motels. There are two large trucking company sites along with several truck or equipment rental, repair, or suppliers. The I-70 Drive-In is also located in this area.

Suburban Sub-Area

Businesses in the Suburban Sub-Area are typically found close to the interchanges on I-70. This area features a number of small to medium strip shopping centers including the Wal-Mart shopping center at the U.S. 40 interchange. The area also includes scattered motels, gas stations, restaurants, and storage facilities. There are a number of small office buildings near the Noland Road interchange.

I-470 Sub-Area

Businesses in the I-470 Sub-Area are dominated by large bigbox retailers and shopping centers. These include the new Bass Pro Shops development and Independence Center.

How Important is I-70 to the Local, Regional, and National Economies?

I-70 serves a wide variety of transportation and freight uses. It is vital to the local economy as it transports thousands of workers to and from their jobs in the Kansas City area and provides access to hundreds of businesses located along the corridor and in downtown Kansas City. I-70 is also important to the regional and national economies as it provides an important connection for the movement of goods.

Business Stakeholder Discussions

The Study Team met with representatives of a number of business groups including chambers of commerce and local economic development groups and agencies. The purpose of these meetings was to gain a greater understanding of how the existing I-70 freeway affects local and regional businesses and the economy. A common theme in these discussions was how



Bass Pro Shops

I-70 is a key part of the interstate system in the Kansas City area and affects the daily lives of thousands of residents.

I-70 provides an essential connection for freight transportation and serves local as well as national businesses. Stakeholders emphasized the importance of avoiding congestion on I-70 and of fluid freight movement throughout the area. They are concerned about paying the increased costs for goods and employees that are tied up in traffic. The interchange connections between I-70 and other major routes are important to the local economy and must function well to allow freight and employees to move around the area with ease.

Business and economic stakeholders were concerned with several issues on I-70 including congestion at key bottleneck locations, the need for long-term repairs and redesign, and the desire for more public transportation along the corridor. Other key I-70 economic related issues brought up by business and economic groups included:

- The importance of improving access points between I-70 and downtown
- The potential for I-70 to be a true gateway entrance into downtown Kansas City
- The effect of noise on property values adjacent to the freeway
- The importance of proper signing so that travelers can find their way to businesses and amenities
- Opportunities for development and redevelopment including the areas around I-435 and the Truman Sports Complex
- Linking of development across I-70 between downtown and the River Market

Importance of I-70 to Regional and National Freight

As discussed in greater detail in the Purpose and Need Technical Memorandum located in **Appendix B**, I-70 is an important route for the shipment of national and regional freight. Kansas City's mid-continent location makes the region a key location for the movement of goods. I-70 is an important part of that freight movement system. The origin-



Stakeholders are interested in Development/ Redevelopment around I-435 and the Truman Sports Complex.

I-70 First Tier Draft EIS Economics destination study completed for the I-70 Statewide Study showed that approximately 30 percent of trucks entering the Kansas City area on I-70 from the east were through trips that exited the Kansas City area on I-70 to the west. Similarly, approximately 35 percent of trucks entering the Kansas City area from I-70 on the west were through trips that exited via I-70 on the east. Trucks hauling freight through the area tend to avoid peak hour congestion on routes like I-70 when possible. Nonetheless, congestion delays on I-70 are a cost to national freight carriers as well as local business owners and residents.

How Would the No-Build Strategy Affect Businesses and Jobs in the Study Area?

The No-Build Strategy would not have a direct effect on businesses and jobs as it does not include the relocation of any businesses. However, under the No-Build Strategy, the congestion, bottleneck, and goods movement issues discussed in **Chapter 1** and discussed above would not be addressed. Congestion would continue to grow along I-70 and none of the long-term issues with roadway conditions and access would be addressed. As a result there would be indirect affects on businesses and jobs for the No-Build Strategy.

The thousands of residents that use I-70 on a daily basis to commute to work would continue to experience increasing congestion on their daily commute. This would result in more difficult access to jobs in the central parts of the Kansas City area and a potential reduction in the attractiveness of downtown as a location for employment. More downtown workers may also seek housing closer to downtown as a result.

The 2007 Texas Transportation Institute Study on Urban Mobility found that the cost of congestion in the Kansas City area was \$256 million in 2005, or \$309 dollars a year for each regular commuter during the peak periods. As a major highway in the Kansas City area, congestion on I-70 is part of this overall regional cost of congestion. The No-Build Strategy will not provide additional relief of the cost of congestion in the Kansas City area.

What is an Origin-Destination Study?

An origin-destination study is a survey of motorists and/or truck drivers who are driving on a particular roadway or set of roadways. Motorists are stopped at a logical point such as a rest area or major intersection and asked questions about their trips. The key questions typically include where they live, where they are coming from, where they are going to and whether they may stop along the way.



Congestion would continue to cost residents and businesses with a No-Build Strategy.

What is a logistics chain?

A logistics chain is the series of modes and connections used to transport a particular type of product or material. For example, a product may travel from a factory to a boat by truck. It may then be shipped overseas to another port. It may then be loaded on a train and travel across many states before being transferred to a truck for delivery to stores. Each step is a part of the overall logistics chain for the product.

Why is dependability of travel important to the trucking industry?

Many companies and freight haulers depend on just in time delivery of goods or materials. This means that a truck shipment is shipped to arrive right when it is needed. This reduces the need for warehouse and storage space. In order to efficiently carry out just in time deliveries, trucking companies need to be able to accurately predict the amount of travel time a shipment will take. When a certain roadway or route regularly has unpredictable travel times due to congestion and other factors, truckers cannot dependably rely upon it for just in time deliveries.

The No-Build Strategy may negatively affect jobs related to the freight trucking industry and for businesses that rely on I-70 for product delivery. Congestion causes travel time delays for the transportation and delivery of goods. This costs businesses because of increased fuel usage, wages for drivers stuck in traffic, lost productivity of trucks, and a reduction in the number of daily trips that truck drivers can make. Congestion also costs trucking firms and manufacturers because of the uncertainty it creates in the delivery process.

The 2005 MoDOT Freight Study reports, "In the freight industry, retail marketers (e.g. Wal-Mart) are often the influencing parties determining how their freight shipments move across the national and international transportation system. To them, reliability and dependability of the logistics chain and how dollar investment impacts trip time to speed the delivery process from production to customer represents the key critical component to their industry." consumption increases due to congestion and backups would affect both those traveling through the area on I-70 and local traffic. This would increase the cost of transporting goods and the cost for commuters to get to work.

The cost of congestion is felt by trucking companies, manufacturers, and individuals passing through the area. Overall effects on jobs may be minimal but the business costs are ultimately passed on to consumers in the form of higher prices to account for higher transportation costs.

How Would the Build Strategies Affect Businesses and Jobs in the Study Area?

The Build Strategies including the Identified Preferred Strategy would affect businesses and jobs in three key ways:

- By requiring businesses to relocate as part of the acquisition of new right of way
- By changing access near the location of specific businesses that could make it easier or more difficult for customers to reach the business
- By improving travel times and goods movement for businesses and workers through reduced congestion

3.6-6 **Economics** The following paragraphs discuss the potential effects on businesses and jobs by each of the Build Strategies including the Identified Preferred Strategy. The Identified Preferred Strategy is the Improve Key Bottlenecks Strategy in the downtown loop and from the downtown loop to east of I-435. From east of I-435 to I-470, the Identified Preferred Strategy is one of either the Improve Key Bottlenecks Strategy or the Add General Lanes Strategy. The effects on businesses and jobs are discussed for each Sub-Area of the I-70 corridor as shown in **Figure 3.0**.

Downtown Sub-Area

The Improve Key Bottlenecks and Transportation Improvement Corridor Strategies would have similar affects on businesses and jobs in the Downtown Sub-Area. As discussed in **Section 3.4 Relocations**, the Improve Key Bottlenecks Strategy would relocate seven businesses in the Downtown Sub-Area while the Transportation Improvement Corridor would relocate eight businesses in this area. The jobs associated with these businesses would be moved to other locations or potentially eliminated if the businesses decided to close instead of relocate.

Key Bottlenecks The **Improve** and **Transportation** Improvement Corridor Strategies will also improve the flow of traffic to downtown, providing better access for goods movement and employees. Both strategies would include implementation of certain strategies from the downtown loop master plan that would improve circulation in the downtown loop and would also consolidate interchange access on the north and east legs of the loop. Changes to access in the downtown loop may change the routes people take to certain businesses. Further details on the potential downtown loop improvements will be determined in the Second Tier studies and more detail on the economic effects of changing access points in the downtown loop will be determined as part of that study. The Identified Preferred Strategy in the Downtown Sub-Area is Improve Key Bottlenecks and would have the same effects on businesses and jobs.

The Add General Lanes Strategy would have greater affects on businesses and jobs in the Downtown Sub-Area than the other strategies. The Add General Lanes Strategy would relocate 21 businesses in the Downtown Sub-Area. This includes several light industrial properties near the U.S. 71/I-70 interchange. Most of these relocations are related to providing the missing ramps between I-70 and U.S. 71 in the southeast corner of the loop and between I-670 and I-35 in the southwest corner of the loop. The number of downtown area jobs that would need to be relocated for this strategy would be greater than the other strategies due to the higher number of business relocations and the type of businesses involved including light industrial properties. The jobs associated with these businesses would be moved to other locations or potentially eliminated if the businesses decided to close instead of relocate.

The Add General Lanes Strategy also would include implementation of certain strategies from the Downtown Loop Master Plan that would improve circulation in the downtown loop. A benefit of these strategies to businesses will be improved flow of traffic to downtown and improved movement of goods and employees. This strategy also would consolidate interchange access on the north and east legs of the loop. Further details on the potential features of the downtown loop improvements will be determined in the Second Tier studies and more detail on the economic effects of changing access points in the downtown loop will be determined as part of that study.

<u>Urban Sub-Area</u>

All Build Strategies would affect businesses and jobs through relocations in the Urban Sub-Area. The Improve Key Bottlenecks Strategy has the fewest anticipated business relocations (19) in this area and the fewest anticipated job relocations. The Identified Preferred Strategy is Improve Key Bottlenecks in this Sub-Area.

The Add General Lanes Strategy and the Transportation Improvement Strategy would have substantially higher business and job relocations. The Add General Lanes Strategy would relocate an estimated 31 businesses and the Transportation Improvement Corridor Strategy would relocate an estimated 47 businesses. All of the Build Strategies would improve the flow of traffic through the Urban Sub-Area

I-70 First Tier Draft EIS Economics and to Urban Sub-Area businesses, providing better access for goods movement and employees.

I-435 Sub-Area

All Build Strategies including the Identified Preferred Strategy would have similar effects on businesses and jobs through the I-435 Sub-Area. Most of the effects would be due to relocations. The relocation estimates in this area are very similar for all strategies including 13 to 15 businesses. The impacted businesses include those near the U.S. 40 west and the Blue Ridge Cutoff interchanges. The potential relocations include both travel oriented businesses, such as hotels and restaurants, as well as a few local businesses. The jobs associated with these businesses would be moved to other locations or potentially eliminated if the businesses decided to close instead of relocate. The actual relocations may be reduced during detailed design in the Second Tier studies.

The existing committed I-435 interchange improvements are anticipated to include the closure of the Manchester Trafficway ramps to/from I-70. This would affect travel patterns in the area as discussed in the separate Interstate Access Justification Report prepared for that project.

Suburban Sub-Area

All Build Strategies would affect businesses and jobs through relocations in the Suburban Sub-Area. The greatest effect on businesses is expected as a result of improvements to the three closely spaced interchanges between Sterling Avenue and Blue Ridge Boulevard. The Improve Key Bottlenecks Strategy would relocate 13 businesses; the Add General Lanes Strategy would relocate 25 businesses; and the Transportation Improvement Corridor Strategy would relocate 38 businesses. Thus the Identified Preferred Strategy would relocate 13 to 25 businesses depending on the strategy chosen and the refinements made in the Second Tier studies. The jobs associated with these businesses would be moved to other locations or potentially eliminated if the businesses decided to close instead of relocate.

What is the Property Tax Base?

The property tax base of a community is the combined taxable value of all properties in the community. This includes the taxable value of real estate and of personal property such as equipment owned by businesses. The property tax base is different from property taxes. Property taxes are calculated by multiplying the property tax base by the property tax rates for the community.

I-470 Sub-Area

All Build Strategies would affect businesses and jobs through relocations in the I-470 Sub-Area. Three businesses are expected to be relocated for the I-470 interchange improvements regardless of the strategy chosen. The jobs associated with these businesses would be moved to other locations or potentially eliminated if the businesses decided to close instead of relocate.

How would the Build Strategies Affect the Tax Base of the Communities in the Study Area?

Each of the Build Strategies including the Identified Preferred Strategy would directly affect the tax base of the local communities, including the City of Kansas City, City of Independence, Jackson County, and local school districts by removing land used for improvements from the property tax rolls. MoDOT would not pay property taxes on property purchased for improvements to I-70. The Build Strategies include a substantial number of relocations of homes and businesses which would represent a decrease in available property tax base. **Table 3.6.2** shows the size of the property tax base for the Study Areas communities.

Table 3.6.2 Total Property Taxable Value for Study Area Communities

		Average Growth Rate per
	Total Taxable Value in 2007	Year 2002 to 2007
Jackson County	\$10.036 Billion	7.0%
City of Kansas City	\$5.186 Billion	5.9%
City of Independence	\$1.053 Billion	3.2%
Kansas City School District	\$3.200 Billion	4.8%
Independence School	\$0.813 Billion	4.6%
District		

 $Sources: State\ Tax\ Commission\ of\ Missouri,\ Budget\ Information\ for\ Kansas\ City\ and\ Independence,\ Missouri\ Department\ of\ Elementary\ and\ Secondary\ Education.$

Notes: At time of publications, 2007 was the newest available data year for all of the sources. Total taxable value includes personal property and represents the value of real estate and property not the amount of taxes collected. The amount of tax revenue collected is much lower and depends on the tax rates of the individual jurisdiction.

Jackson County currently has approximately 290,000 taxable parcels. The Build Strategies would relocate approximately 250 to 600 properties while acquiring small amounts of land from approximately 350 to 400 additional parcels. The Build

3.6-10 Economics

Strategies would acquire parcels with a taxable value that is higher than the average taxable parcel value for the county. However, given the magnitude of taxable value available to the Study Area communities, it is reasonable to expect that the taxable value lost would be less than one percent for any community and less than the average growth rate per year in taxable value. The Second Tier studies will include completion of a detailed analysis of property taxable value affected by improvements to I-70.

The City of Kansas City has a one percent earnings tax. If relocated businesses or residents chose to move out of the city entirely, there would be a loss of earnings tax revenue. The strategies with higher numbers of relocations would have a higher probability of businesses and residents leaving the city entirely.

The City of Kansas City, City of Independence, and Jackson County each have local option sales taxes. Revenue from sales taxes could be marginally reduced if relocated homes or business owners moved entirely out of these communities.

The Build Strategies would also require the purchase of land within the downtown Kansas City Community Improvement District (CID) and potentially several downtown Kansas City and Independence Tax Increment Financing (TIF) areas. These are special districts where a portion of property tax revenue or other tax assessments go directly to finance improvements related to the district. Acquisition of land in these districts would reduce the available tax base within the districts, potentially affecting their revenue sources. The potential impacts on specific CIDs and TIFs will be investigated in more detail in the Second Tier studies.

For the Transportation Improvement Corridor Strategy, How Would a Toll Lane Affect the Economy?

A toll lane would increase the transportation cost to the road user through the tolls paid. A toll lane would also provide improved traffic flow and travel time savings for the toll lane users which would help offset the costs of the toll. The collected tolls would help maintain and operate the road thus reducing the future public investment costs.

A key consideration for the use of a toll is the potential effect on low-income travelers who rely on I-70. These travelers may not be able to access the toll lane and save travel time due to a lack of financial resources. If the toll is implemented as part of a high occupancy lane, low-income users could still access the new lanes by car pooling or using transit. The investment in a toll lane would also have minor job creation benefits related to toll collection and toll system management.

What are the Economic Impacts of the Investment of **Construction Dollars?**

The investment of construction dollars to improve I-70 would result in the creation of new jobs. When an investment is made in the construction of a transportation facility, the companies and individuals receiving payment for building the project would in turn spend the money they receive on other goods and services. Companies and individuals receiving the benefit of reduced travel time and crash costs would also invest portions of these savings in local and state economies.

Based on the estimated construction cost ranges for the Build Strategies from \$580 million to \$840 million, the Study Team estimates that between 20,000 and 29,000 jobs would be created over the construction period for improvements. These job estimates are based on a standard ratio used by FHWA that every \$1 billion of federal and state dollars invested supports 34,779 jobs. Most of these jobs would be short-term construction related positions. Local job benefits for construction would depend in part on the availability of local materials and workers. MoDOT seeks the best possible value from its investments when tendering construction projects and, like any other project, there is no guarantee local firms would be selected or local materials used.

How will the Economic Analysis Proceed in the Second **Tier Studies?**

The Second Tier studies will analyze the effects of improvements to I-70 on businesses, jobs, freight movement, and taxes in greater detail. More specifics will be known about the businesses that would be relocated and this will

3.6-12 **Economics** allow for more detail on the tax base loss and job relocations involved. There will also be greater detail and specifics on potential changes in access at interchanges and their effects on local businesses and commuters. Cost estimates and estimates of the economic impact of the value of construction dollars will be refined in greater detail. The Second Tier studies will also include discussion of how economic effects may be mitigated.

3.7 Visual Effects

This section discusses the potential visual effects of improvements to I-70 as well as measures to avoid, minimize, or mitigate these potential visual impacts.

The visual assessment process provides an analysis of the landscape character for the Study Area. It is also used to determine the type and degree of visual impact for various viewers, such as the interstate user, the recreational tourist, and the local resident.

What Does the Existing Study Area Look Like?

The Study Area and surroundings are best described (from west to east) as downtown central business district, urban residential with some commercial uses, and suburban residential. Residential and commercial properties are the most dominate land uses in the Study Area. Single-family homes make up the majority of the residential land uses while retail, office, and industrial properties are prevalent along corridors throughout the Study Area.

The Study Area is rolling terrain. The downtown central business district is a very urban, built up visual experience that differs from the rest of the corridor. The urban area lies east of downtown and provides a mix of business activity and modest single family homes. The suburban section of the Study Area includes retail activities near the interchanges surrounded by residential.

The visual quality of an area may depend on the preferences and subjective values of the viewer. FHWA produced a manual titled <u>Visual Impact Assessment for Highway Projects</u> to assist in evaluating the visual qualities of a project area. The assessment of the visual quality of an area consists of an evaluation of the vividness, intactness, and unity of the landscape.

<u>Vividness</u>: The relative strength of the seen image and the visual impression received from contrasting landscape



Downtown Skyline



Urban Housing - Apartment Building at 17th Street and Broadway Avenue



Suburban Housing

elements as they combine to form a striking and distinctive pattern.

<u>Intactness</u>: The integrity of visual order in the natural and human-built landscape, and the extent to which the landscape is free from visual encroachment.

<u>Unity</u>: The overall visual harmony of the composition and degree to which various elements combine in a coherent way.

In order to complete the analysis, the Study Area was divided into four areas that display consistent visual characteristics and a uniform visual experience which are called "Visual Assessment Units" (VAU). Each VAU may be thought of as outdoor room that has a direct relationship to the natural layout of the area and associated land uses. The boundaries of these visual environments occur where there is a change in visual character. The strongest determinations of the visual boundaries are topography and landscape components. The four VAUs (**Figure 3.7.1** at the end of this chapter) within the I-70 FTEIS corridor have the following characteristics:

- <u>VAU 1, Central Business District</u>: VAU 1 consists of a mature urban central business district. Bartle Hall, Sprint Center, the Kansas City Star building, and civic buildings comprise the key visual make up of VAU 1.
- VAU 2, Urban Commerical Area: The area in and around this VAU is dominated by constructed elements. Between VAU 1 and 18th Street, the views from the roadway are of a commercial activity. The standout feature in VAU 2 includes the United States Postal Service's sorting and distribution center. Overall, the built environment is close to the highway which produces the sense of a narrowed, constricted travel corridor.
- <u>VAU 3, Urban Neighborhood Area</u>: The area in and around this VAU is dominated by constructed elements. Between 18th Street and I-435, the views from the roadway are of single family homes and a pocket of commercial activities near Van Brunt Boulevard and U.S. 40. The standout feature in VAU 3 includes the Blue River Valley. Overall, the built



VAU 1 – Southwest Corner of Loop Looking at Downtown



VAU 2 – Eastbound I-70 Looking South



VAU 3 - Residences Close to I-70

- environment is close to the highway which produces the sense of a narrowed, constricted travel corridor.
- VAU 4, Suburban Neighborhood Area: VAU 4 provides a contrast to the previous VAU section in regards to the developed environment being set further away from the travel corridor. This VAU is primarily residential with nodes of business activities near the interchanges. The key features in this VAU are the Jackson County Sports Complex and two regional commercial areas, Blue Ridge Crossings and the area around the I-470 interchange.

What Is the Existing Visual Quality?

Existing Routes VAU 1 Central Business District

The existing route is comprised of heavily built environment. The mid and the background views from the road are generally blocked by the built environment. The exception is the west leg of the downtown loop looking west over the built up Missouri River valley.

The south leg of the downtown loop has very limited visual opportunities as the roadway is below the surrounding land use and bounded by walls. The north leg of the downtown loop provides sights of downtown buildings and a park in the Columbus Park neighborhood. The west leg of the downtown loop also provides a blend of walls and more pleasing views stretching across the valleys of the Missouri and Kansas Rivers.

The downtown loop is not without a few view sheds. The Missouri River is visible from the highway, a brief break from the otherwise built environment.

The viewers of the roadway generally see a wide expanse that can be intimidating and act as a barrier between downtown and the River Market area to the north or the Crossroads district to the south of downtown, especially to pedestrians. The mid and the background views of the road are generally blocked because the roadway is lower than the surrounding land uses in addition to the built environment.



VAU 4 - Eastbound I-70



VAU 1 - South Leg of the downtown loop traveling east

What is a view shed?

A view shed is the area of land, water, or other environmental element that is visible from a fixed vantage point.



VAU 1 – Missouri River view from the West Leg of the downtown loop



VAU 1 - North Leg of the downtown loop looking west

Existing Routes VAU 2 Commercial Area (Troost Avenue to 18th Street)

This urban section of I-70 has primarily commercial development very close to the highway. Looking south from the highway the view is generally of the backside of buildings. Like VAU 1, much of the mid and background experiences are blocked by the foreground built environment. The westbound traveler does experience the Kansas City skyline from a number of locations on I-70.



VAU 1 - South Leg of the downtown loop looking west



VAU 2 - Prospect Avenue looking west



VAU 2 - Cross Street under I-70



VAU 2 - Westbound I-70 entering downtown



VAU 2 - Eastbound looking south

The view of the roadway is typical for a six-lane freeway. The relatively wide swath of pavement requires similarly wide bridges to span cross streets. Like VAU 1, traversing over or under the freeway can be intimidating.

Existing Route VAU 3 Urban Neighborhood Area (18th Street to I-435)

This section is mostly residential with commercial nodes around Van Brunt Boulevard and U.S. 40 interchanges. VAU 3 also includes the Blue River. VAU 3 provides travelers the sense of a tight, narrow roadway due to the steep embankments with other areas providing a slightly more open feel. VAU 3 has residential development very near the roadway in several locations. The mid and background views are intermittently blocked by the foreground built environment. The mid and background views are best over the Blue River.



VAU 3 - Residences Close to I-70



VAU 3 - Eastbound I-70 with steep embankments



VAU 3 - Myrtle Street View of and Proximity to I-70



VAU 3 – View of I-70 from Lister Street



VAU 3 -Looking South over Blue River

The viewers of the roadway are generally limited to the foreground view of the roadway due to the built and natural environment except through the Blue River valley. The view of the roadway is of a heavily traveled roadway with three lanes in each direction.



VAU 3 - 27th Street view of I-70

Existing Route VAU 4 Suburban Neighborhood Area (I-435 to I-470)

This section is mostly residential with businesses around the interchanges. VAU 4 provides a generally open feel with gently sloped grass perimeters into tree line right of way lines. The businesses at each of the interchanges are generally occupied by office and retail uses. The neighborhood homes

are seen far less often than in VAU 3, however, they still exist relatively close to the roadway. The westbound traveler receives one of the best views of the Kansas City skyline framed by the Stadium Drive Bridge.



VAU 4 - Westbound I-70 near Stadium Drive

The viewers of the roadway are generally limited to the foreground view of the roadway due to the built and natural environment. The view of the roadway is a typical six-lane interstate. With the number of lanes, the structure width required to span a cross street or the length of a structure over the interstate can be extensive.

What are the Visual Effects of the Build Strategies?

No-Build Strategy

The future visual conditions with the No-Build Strategy will remain consistent with the existing conditions. The view of existing roads would not change and the view from the existing roads would only undergo minor changes as new buildings are constructed or old buildings are replaced or removed.

Build Strategies

The overall view of the roadway and the view from the road will vary somewhat among the three Build Strategies;



VAU 4 - Eastbound I-70



VAU 4 - Nearby Residences



VAU 4 - Blue Ridge Crossings at U.S. 40

however, the Study Area view shed is well developed with urban residential and commercial uses and will remain essentially unchanged.

<u>VAU 1</u>: The downtown loop improvements will focus on the interchanges, ramps, and general access considerations to improve safety, reduce congestion, and improve access across to the downtown loop freeway system. The views of the roadway and the views from the roadway will generally be the same in each of the Build Strategies compared to the No-Build Strategy.

<u>VAU 2</u>: The urban commercial area will experience access improvements at the Truman Road interchange, improvements to the I-70 curve at Benton Boulevard, and other interchange improvements. An additional lane, either for general traffic use or as part of the transportation improvement corridor, will change the width of the corridor; however, the overall views of the roadway will be comparable to the existing views.

The overall views of the roadway and the views from the roadway will change only slightly with any of the three Build Strategies since the alignment of the roadway will not change dramatically.

<u>VAU 3</u>: The urban residential area will experience improvements through the 18th Street, 23rd Street, and 27th Street interchanges, improvements to the I-70 curve at Jackson Avenue, more interchange improvements between Jackson Avenue and I-435, and a rebuilt I-435 interchange with I-70. The overall views of the roadway and the views from the roadway will not change.

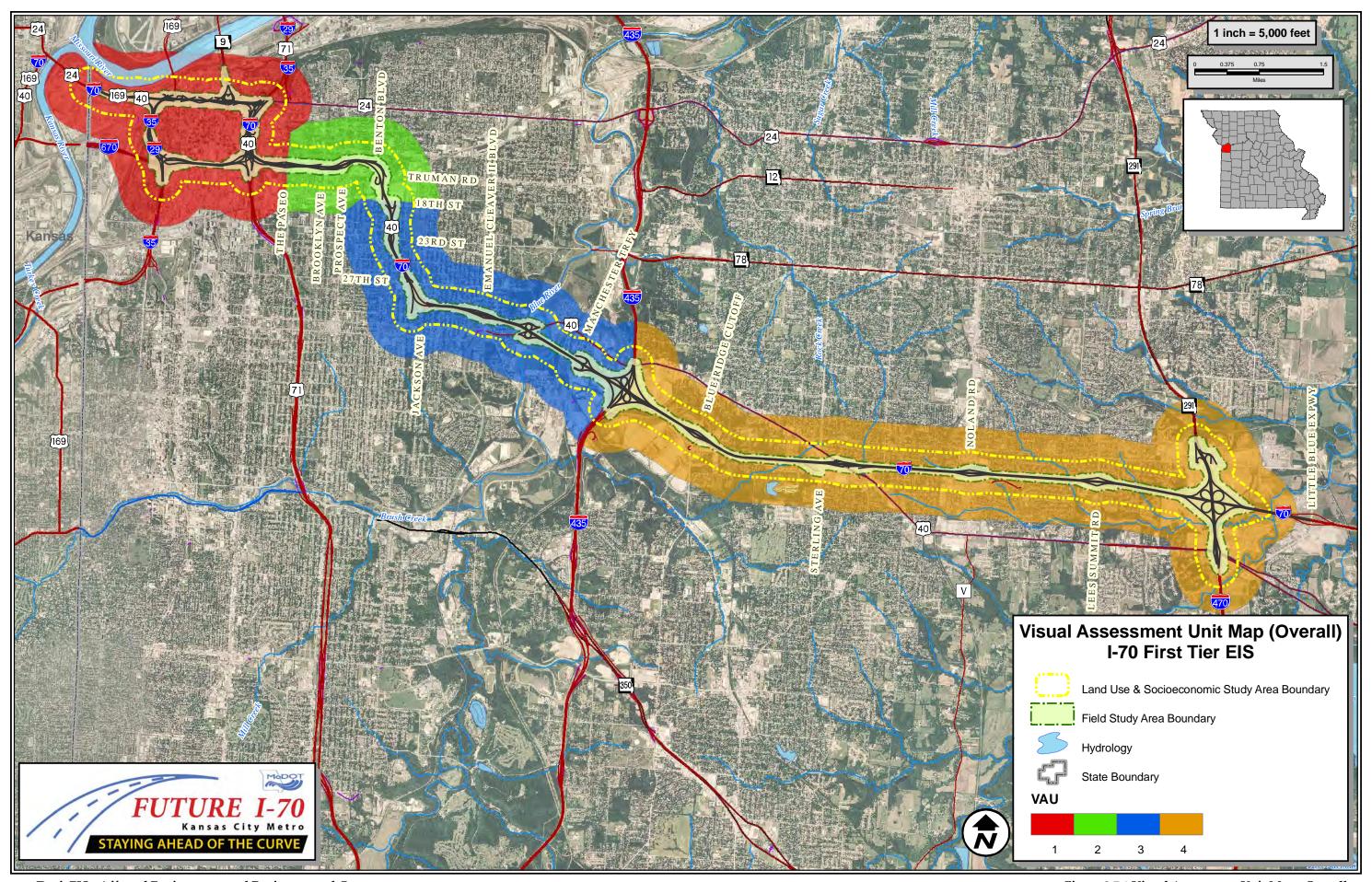
<u>VAU 4</u>: The suburban neighborhood area will experience a rebuilt I-435 interchange and a rebuilt I-470 interchange. The difference in aesthetics of a cloverleaf interchange versus a different interchange type is minimal. The overall views of the roadway and the views from the roadway will be comparable to the existing views.

Are there Other Visual Impacts?

Indirect visual impacts could result from each of the three Build Strategies being considered. Improved roadway lighting and bicycle/pedestrian crossings at interchanges are examples of indirect changes that could affect the overall visual quality throughout the Study Area. These features will be more specifically developed during the Second Tier studies.

What are the Next Steps for Visual Impacts?

The Second Tier studies will further evaluate and refine the visual assessments of the Build Strategies for each part of the corridor. During Second Tier studies there will be greater analysis and discussion of aesthetic and visual improvements in the corridor such as landscaping, walls, bridges, lighting, signing, and other aesthetic features. MoDOT will work with the local community and neighborhood groups regarding the long-term visual effects of any improvement.



Draft EIS - Affected Environment and Environmental Consequences

Figure 3.7.1 Visual Assessment Unit Map - Overall

3.8 Hazardous Waste

This section discusses the known and listed hazardous waste sites in the Study Area and the potential for the strategies to affect or disturb materials at these sites.

What is Hazardous Waste?

Hazardous wastes as regulated by the Environmental Protection Agency (EPA) are defined as "waste with properties that make it dangerous or potentially harmful to human health or the environment. Hazardous wastes can be liquids, solids, contained gases, or sludges. They can be the by-products of manufacturing processes or simply discarded commercial products, like cleaning fluids or pesticides". In order for a waste to be considered hazardous, it must exhibit at least one of the four characteristics of hazardous waste: ignitability, corrosivity, reactivity, or toxicity. If the waste exhibits just one of these characteristics, it is given the title of hazardous waste.

How did the Study Team Identify Hazardous Waste Sites in the Study Area?

The Study Team reviewed the EPA and Missouri Department of Natural Resources (MoDNR) online databases for major hazardous waste locations and interviewed the Mid-America Regional Council's (MARC) regional solid waste management planner. Active, inactive, closed, and proposed locations were evaluated. The locations were plotted on a Study Area map by online coordinates to determine where sites were located. A windshield survey was conducted to verify the locations, their coordinates (using a Garmin ETrex), and obvious limits of contamination.

Where are the Hazardous Waste Sites located within the Study Area?

The Study Team identified five sites located in the Study Area that are listed in **Table 3.8.1.** The sites include three Delisted Superfund sites and two active Hazardous Waste Treatment

What is a Major Hazardous Waste Site?

A major hazardous waste site is a Superfund site; Hazardous Waste Treatment, Storage, or Disposal Facility (TSDF); or solid waste landfill.

What do the four characteristics of hazardous waste mean?

Ignitability - Ignitable wastes can create fires under certain conditions, are spontaneously combustible, or have a flash point less than 60 °C. Examples include waste oils and used solvents. Corrosivity - Corrosive wastes are acids or bases that are capable of corroding metal containers, such as storage tanks, drums, and barrels. Battery acid is an example.

Reactivity - Reactive wastes are unstable under normal conditions. They can cause explosions, toxic fumes, gases, or vapors when heated, compressed, or mixed with water. Lithium-sulfur batteries are an example. Toxicity - Toxic wastes are harmful or fatal when ingested or absorbed (e.g., containing mercury, lead, etc.). When toxic wastes are land disposed, contaminated liquid may leach from the waste and pollute ground water.

What is a Delisted Superfund Site?

A Delisted Superfund Site is a major hazardous waste site that has been deemed to pose no hazard and classified as No Further Remediation Action Planned (NFRAP).

What are Recognized Environmental Conditions (REC)?

The presence of or likely presence of hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products.



Philips Solvent Recovery Services TSDF

Storage or Disposal Facility (TSDF) sites. The locations of the sites are shown on **Figure 3.8.1** at the end of this chapter. The Study Team determined the TSDF and Superfund sites have no obvious contamination visible from the right of way.

Table 3.8.1 Hazardous Waste Sites in the Study Area

	Hazardous Waste Site	
Site	Type	Status
Philip Services Corp.	TSDF & LQG*	Active
City Environmental	TSDF	Active
Hanna Rubber Co.	Superfund	Delisted
Exide Battery Sales	Superfund	Delisted
Benton Apartments	Superfund	Delisted
*I OC = large quantity generator g	concretes more than 2 200 nounds of a	vacto nor

*LQG = large quantity generator, generates more than 2,200 pounds of waste per month

Throughout the Study Area there are scattered gas stations, dry cleaners, industrial buildings, and potential sites with underground storage tanks. These sites contain recognized environmental conditions that could cause contamination affects if uncovered during construction. This First Tier study did not include an identification of these types of sites, which are not listed. A full project area contamination survey will be completed as part of the Second Tier studies.

Does the No-Build Strategy have any Affects on Hazardous Waste Sites?

The three Delisted Superfund sites in the Downtown Sub-Area of the Study Area are considered to have no potential for contamination and the two TSDF sites in the Downtown Sub-Area are considered to have a low potential for contamination. There are no listed hazardous waste sites in the other portions of the Study Area.

Do the Build Strategies have any Affects to Hazardous Waste Sites?

The Delisted Superfund sites have no potential for contamination. The Philips Solvent Recovery Services site (700 Mulberry Street) has completed corrective actions to resolve previous business and residential exposure and contaminated groundwater migration. The north side of the facility which

faces I-70 has the greatest potential for groundwater contamination (volatile organic compounds) from construction. However, this facility is located a safe distance from the proposed construction areas for the Build Strategies, including the Identified Preferred Strategy, making disturbance of materials improbable.

The City Environmental, Inc. TSDF site is not currently in operation. This TSDF has been identified by the EPA for corrective action; however, mitigation has not been completed at the site. The site location in relationship to the proposed construction areas for the Build Strategies, including the Identified Preferred Strategy, makes the potential for adverse affects minimal.

What are the Next Steps to Address Potential Hazardous Waste Sites?

During the Second Tier studies, MoDOT will complete more detailed project area contamination surveys. These may include further database searches, aerial photography analysis, and site walkovers to identify and verify the presence and potential boundaries of sites with contamination. Potential mitigation measures to address the potential for contamination in areas affected by construction will also be developed during the Second Tier studies.

What is a Volatile Organic Compound (VOC)?

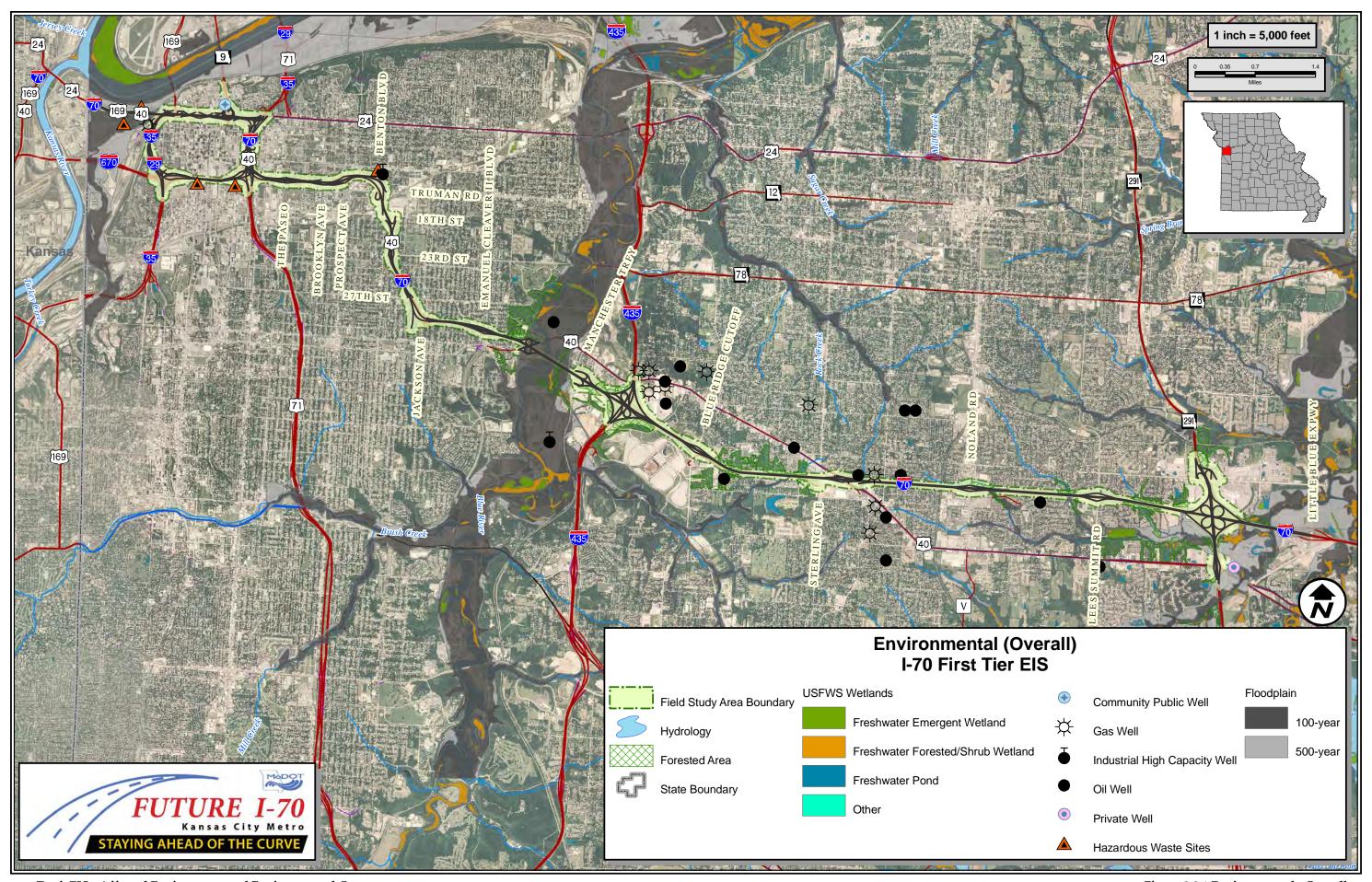
Volatile organic compounds are compounds that have a high vapor pressure and low water solubility. Many VOCs are human-made chemicals that are used and produced in the manufacture of paints, pharmaceuticals, and refrigerants. VOCs are emitted as gases from certain solids or liquids.



City Environmental, Inc. TSDF

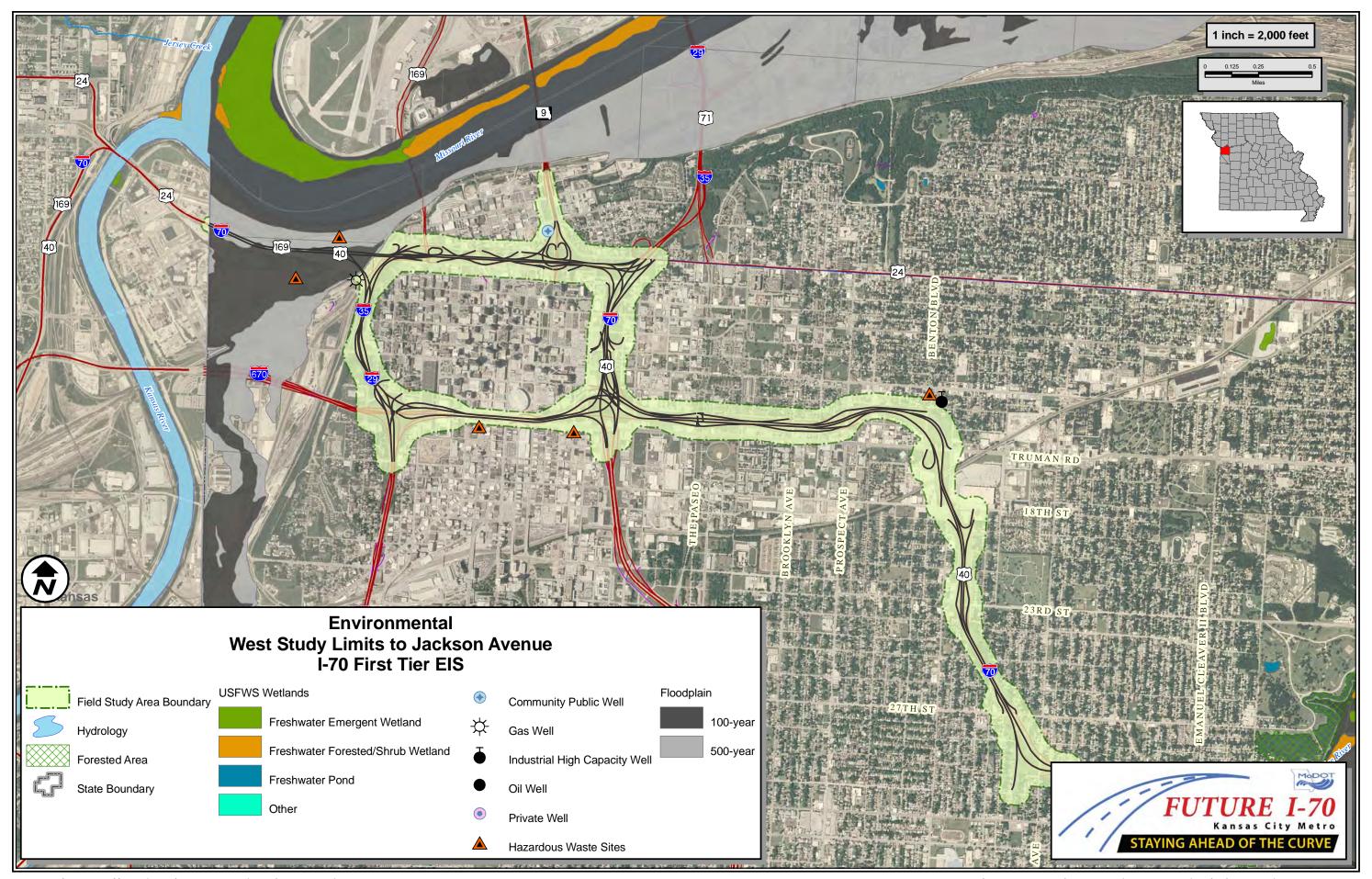
What is meant by Corrective Action?

Accidents at facilities that house hazardous wastes release pollutants into soil, groundwater, surface water, and air. To combat those affects, the Resource Conservation and Recovery Act (RCRA) Corrective Action Program, run by EPA works with responsible facilities to investigate and clean up hazardous releases.



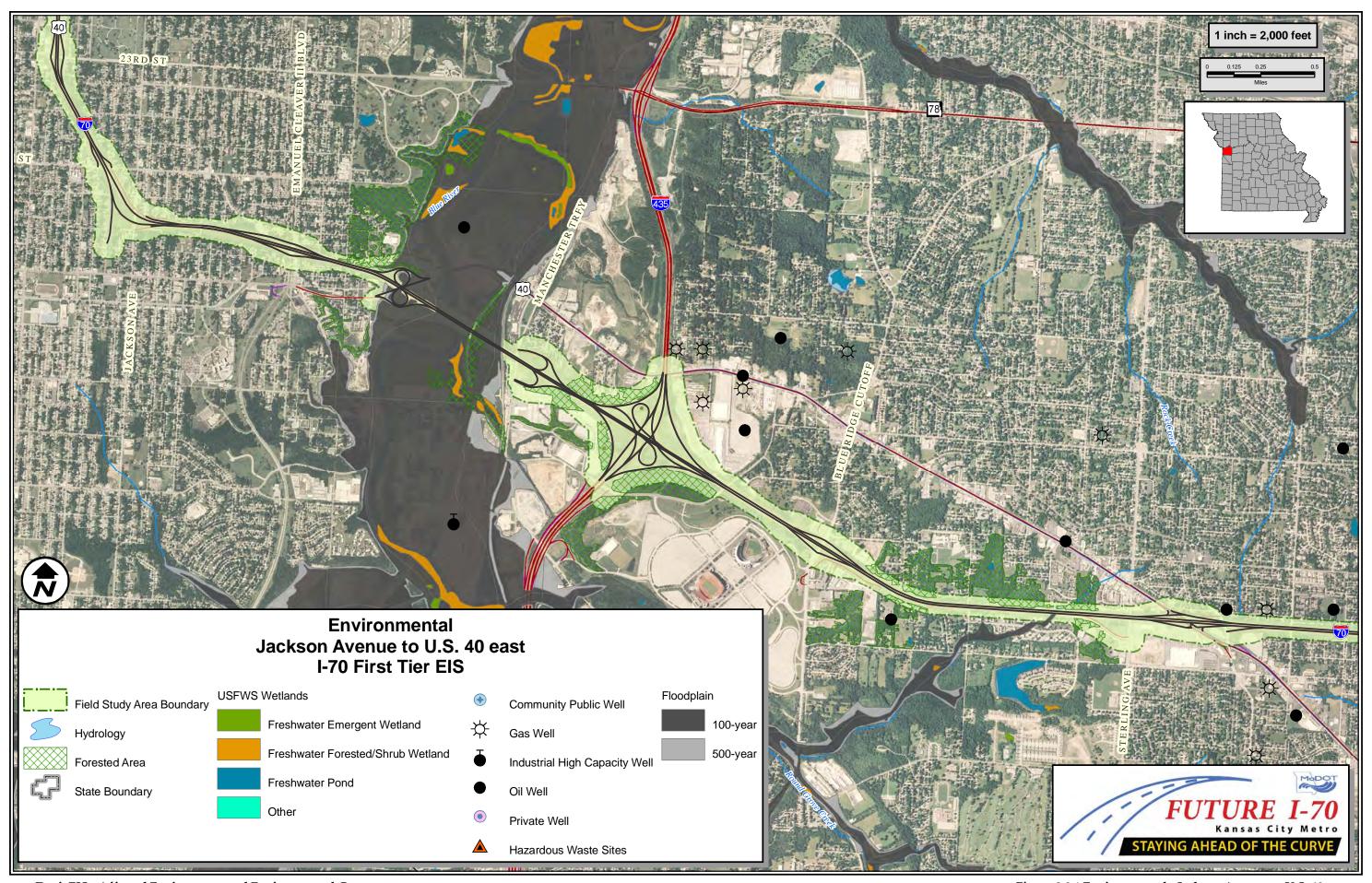
Draft EIS - Affected Environment and Environmental Consequences

Figure 3.8.1 Environmental - Overall



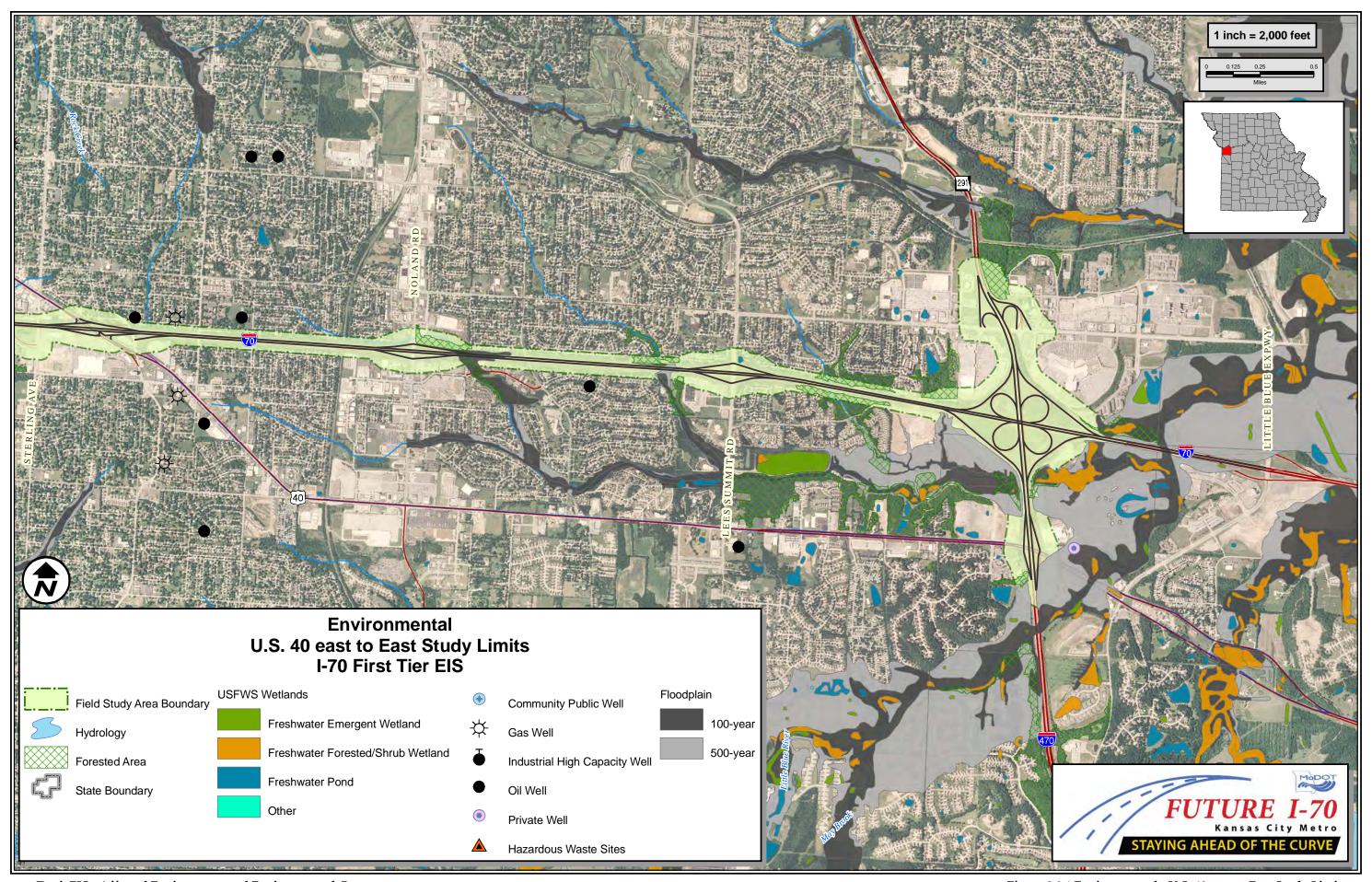
Draft EIS - Affected Environment and Environmental Consequences

Figure 3.8.1 Environmental - West Study Limits to Jackson Avenue



Draft EIS - Affected Environment and Environmental Consequences

Figure 3.8.1 Environmental - Jackson Avenue to U.S. 40 east



Draft EIS - Affected Environment and Environmental Consequences

Figure 3.8.1 Environmental - U.S. 40 east to East Study Limits

3.9 Historic and Archaeological Resources

This section discusses the initial review to determine whether the proposed Strategies will affect properties that are or may be eligible for the National Register of Historic Places (NRHP); or, adversely affect significant historic or prehistoric resources.

The Study Team determined the cultural resource documentation for the FTEIS would include the following:

- Desktop research for known archaeological records and previously reported archaeological sites.
- Development of a generalized archeological site predictive model based upon existing information.
- Desktop research for known architectural investigations.
- Windshield survey to identify potential NRHP eligible architecture.
- Desktop research for known historic bridge investigations.

For this First Tier study, the Study Team surveyed the 18-mile I-70 corridor that extends from the last ramp termini east of the Missouri-Kansas state line to east of the I-470 interchange in Jackson County, Missouri. The survey area included four interchanges and the downtown loop. The surveyed area included a 300 feet wide zone from the shoulders on either side of I-70.

How did the Study Team identify Cultural Resources in the Study Area?

In October 2008, the Study Team conducted a computer database search to gather known historic property information from the National Park Service NRHP files and the Kansas City, Missouri Landmark Commission files. They also conducted an on-site review of the Kansas City Public Library archives and the files of the Historic Preservation Division of the City of Independence. A current list of bridges along the I-70 corridor from the Missouri-Kansas state line to east of I-470 was reviewed to identify potential historic bridges. A windsheld survey of the Study Area was conducted to field verify the known historic architectural properties identified in

Historic vs. Prehistoric

Prehistoric pertains to the time or a period prior to recorded history. Historic means belonging to the past; of what is important or famous in the past; e.g. "historic structures"; "historic times"; "a historical character".

What is a Cultural Resource?

Cultural resources include both physical assets and intangible cultural materials including such things as, artifacts, archaeological sites, buildings, ships, cemeteries, bridges and dams, paintings, sculptures, folklore storytelling, and drama.

What is Desktop Research?

Desktop research uses a computer to obtain online data and information and telephone interviews. the database search and records review, in addition, the windshield survey was used to locate and determine potential above-ground historic properties.

What is a Windshield Survey?

A windshield survey is conducted while driving to make observations. This method is a cursory survey tool that involves making several driving passes in and around the perimeter the Study Area. Some curbside/shoulder stops may be made to take a better look at features.



Early 1900 to present architecture styles in the Kansas City skyline. Photo from the Intersection of Grand and Admiral Avenues in the northeast corner of the downtown loop.

Are there Historic Properties within the Study Area?

The architectural resources that were assessed included historic commercial buildings, private residential buildings, historic districts, bridges, and churches. The Study Team identified 14 historic buildings and four historic districts in or immediately adjacent to the Study Area. The buildings included: one private residence, two church buildings, and 11 commercial buildings. Of the 14 historic buildings, 10 historic buildings and all four historic districts are within the 300 feet wide zone from the shoulders on either side of the downtown loop.

All of the historic buildings identified are located in the Downtown Sub-Area. **Figure 3.9.1** at the end of this chapter provides a map of these locations. No architectural resources were identified in the Urban, I-435, Suburban, or I-470 Sub-Areas.

Many of the commercial buildings that represent the significant architectural materials, forms, and styles in Kansas City architectural history are concentrated primarily in the Kansas City Central Business District (CBD). Some examples of these notable buildings in the CBD that are located immediately adjacent to the I-70 Study Area include:

- The Buick Automobile Company Building, built in 1907 to 1908 in the "Chicago School" tradition at 215 Admiral Boulevard.
- The Richards and Conover Hardware Company Building, designed by Shepard & Farrar and built between 1902 and 1903 at 200 W. 5th Street.
- The Temple Block Produce and Exchange Building, designed by James Basson and built in 1892 located at 531 Walnut Street.

The St. Mary's Episcopal Church designed by William Halsey Wood and built in 1888 and the residence of Frank M. Howe designed by Van Brunt and Howe and built in 1887 are also

located within or immediately adjacent to the Study Area in the CBD. In addition, the Old Town Historic District, Quality Hill Historic District, Quality Hill West Historic District, and the Holy Rosary Historic District are located in the CBD.

Other aboveground resources evaluated for this study include bridges along the I-70 corridor. None of the bridges are historically significant.

The Study Team did not preliminarily identify any potentially NRHP eligible historic properties or cemeteries in the Study Area during the windshield survey. However, a full cultural resources survey of the buildings and other structures will be conducted as part of the Second Tier studies.

How did the Study Team identify Archaeological Resources in the Study Area?

The Study Team consulted the Missouri State Historic Preservation Office (SHPO) archaeological database to identify previous archaeological sites recorded in or near the Study Area. Eighteen sites were identified through this electronic search. In order to evaluate current conditions of the previously recorded sites, the Study Team used the windshield survey and site verification from public right of way.

What Known Archaeological Sites are within the Study Area?

The 18 archaeological sites previously recorded within the Study Area boundaries have largely been destroyed over the years. The site observations revealed that three of the sites are in relatively good condition. Either excessive erosion, brush overgrowth, and/or construction has largely impacted seven of the sites observed. These sites in large measure have lost most of their site integrity. The Study Team was unable to locate eight sites identified in the SHPO database during the windshield survey.



Quality Hill Historic District in the Downtown Sub-Area





North side of the downtown loop

What is the State Historic Preservation Office (SHPO)?

SHPO is an agency within each state and territory charged with enforcing the provisions of the National Historic Preservation Act of 1966. SHPO's allocate National Park Service and state funds to local agencies and private citizens for the protection of sites eligible for listing in the National Register of Historic Places.

The intact known prehistoric and historic cultural resources found in the vicinity of the I-70 corridor are in the vicinity of the downtown loop, the urban area, the I-435 interchange area, and the I-470 section of the Study Area.

What are Environmental Factors?

Environmental factors include but are not limited to water, soil, vegetation elevation and slope of a particular area.

What is Debitage?

Archaeologists refer to the sharp-edged waste material left over when someone creates a stone tool as Debitage.

How are known cultural resources destroyed?

Oftentimes cultural resources are destroyed by development-related activities, such as, road, housing, parking lots, and commercial real estate construction activities.

How Was the Potential for Unknown Archaeological Sites determined for the Study Area?

The Study Team used environmental factors for existing sites to identify areas with potential to have archaeological resources along the Study Area. In addition, the archaeological SHPO database was used for the development of this generalized model to predict locations of unknown sites. Its records include known archeological sites within the boundaries of the current project area. The majority of the existing sites are located on hilltop, hill/slope, ridge top, and upland ravine, bluffs, along stream and river areas. These locations are consistent with the type of locations that archaeologists commonly associate with the settlement choice location of prehistoric groups. The environmental setting information generated from the site verification visit was also used in developing the generalized prediction of potential archaeological site locations along the I-70 corridor.

Are there areas where Potential Archaeological Sites could be located in the Study Area?

The Study Team used a probability method and predicted nine different locations where archeological materials, may be located. See **Table 3.9.1** for the Study Area location of these potential archaeological sites. Historic and/or prehistoric resources could be present at these locations. These sites could contain ceramics, stone tools (lithic), and prehistoric debitage.

Table 3.9.1 Potential Archaeological Sites

	Number of Potential Sites -		
Study Sub-Area Location	Probability Rating		
1-470 Sub-Area	2-High		
1-470 Sub-Alea	1-Moderate		
Suburban Sub-Area	3-High		
I-435 Sub-Area	1-High		
1-455 Sub-Area	2 -Moderate		

How will the Strategies Affect Cultural Resources in the Study Area?

The following is a discussion of the potential effects of the Build Strategies on historic properties and districts. Although the Study Team identified 14 historic properties within or immediately adjacent to the Study Area, none of the properties would require acquisition by any of the Build Strategies. Therefore, none of the strategies would have a direct effect on historic properties. The potential for indirect effects such as noise would need to be evaluated more closely in the Second Tier studies.

The four identified historic districts close to or in the Study Area boundary include Quality Hill District, Quality Hill West District, Holy Rosary District, and the Old Town District.

The No-Build Strategy and the Build Strategies, including the Identified Preferred Strategy will have no effect on these historic structures or historic districts.

Will the Strategies Affect Archaeological Sites?

The potential for affecting known archaeological sites is considered to be minimal because the archaeological resources previously recorded within the Study Area boundaries have been destroyed over the years.

The 18 known sites are located immediately adjacent to the Study Area boundaries and nine potential archaeological sites are located within the Study Area.

What does secondary effects mean for cultural resources?

Secondary effects are caused by such actions as earth moving equipment or construction equipment being driven over cultural resources site locations to the project area. Such impacts can affect the integrity of the site or completely destroy the site.

No-Build Strategy

The No-Build Strategy will have no effect on these cultural resources.

Build Strategies

The design of the Build Strategies, including the Identified Preferred Strategy indicates that none of the known archaeological resources identified in the vicinity of the Study Area will be directly impacted. However, secondary effects could be possible during construction activity.

Potential unknown archaeological resource locations identified by the predictive model in the I-435, Suburban, and I-470 Sub-Areas could be affected by the Build Strategies; see **Table 3.9.2.**

Table 3.9.2 Areas of Potential Archaeological Effects

	Study Area	Number of Potential Archaeological Site
Strategy	Location	Location Affected*
No-Build	Entire Study Area	None
	Urban	None
Improve Key	I-435 Interchange	3 Locations
Bottlenecks	Suburban	None
	I-470 Interchange	4 locations
	Urban	None
Add General	I-435 Interchange	3 Locations
Lanes	Suburban	2 Locations
	I-470 Interchange	4 Locations
Tuenementation	Urban	None
Transportation	I-435 Interchange	3 Locations
Improvement Corridor	Suburban	2 Locations
Comuon	I-470 Interchange	4 Locations
Identified	Urban	None
Preferred	I-435 Interchange	3 Locations
Strategy	Suburban	2 Locations
Strategy	I-470 Interchange	4 Locations

^{*}Sites identified as potential to contain archaeological resources using a predictive model.

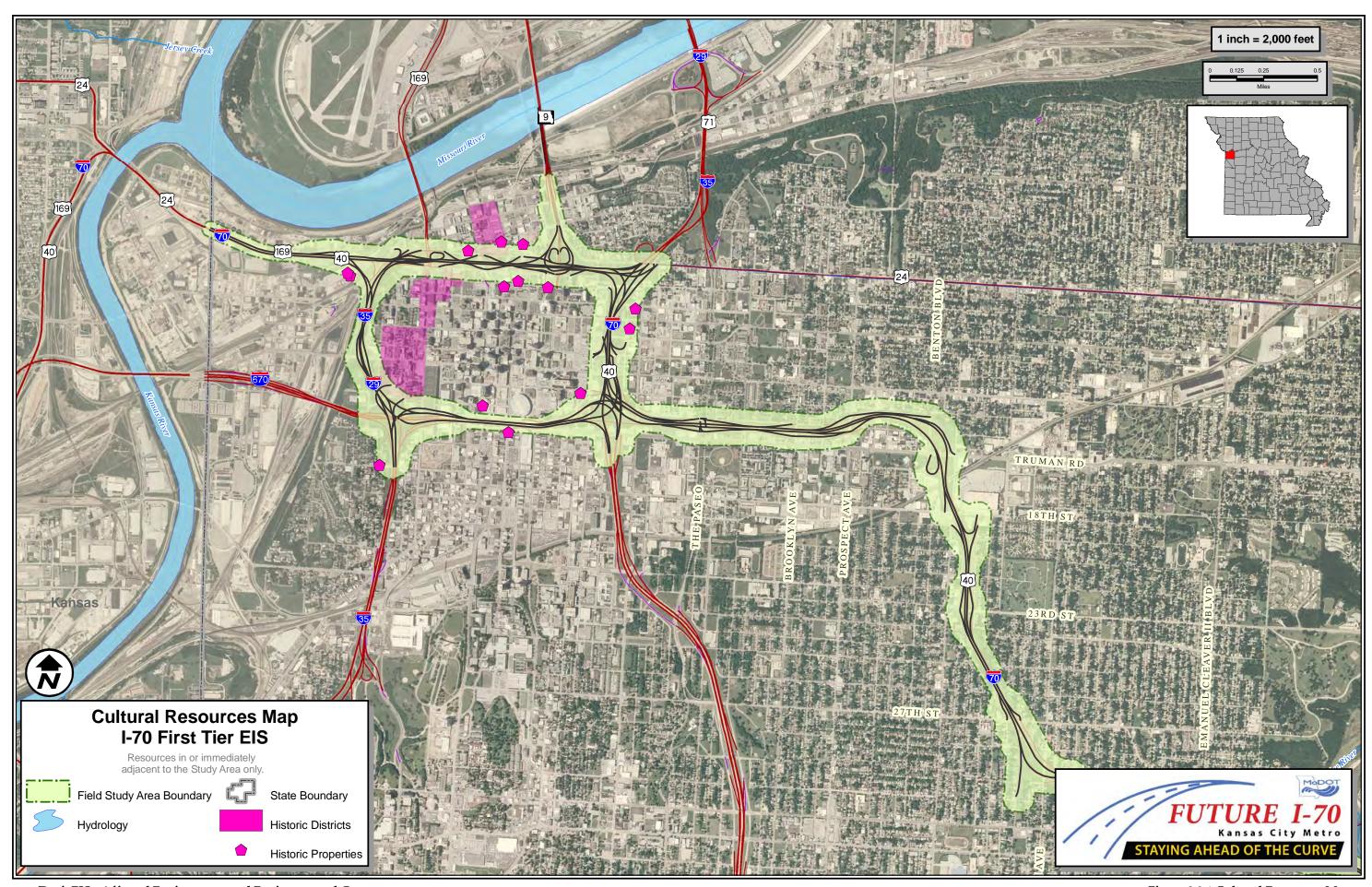
What Cultural Resources Studies Will Occur in the Second Tier Studies?

In the Second Tier studies, detailed cultural resources investigations including site walkovers, Phase 1 and potentially Phase 2 archaeological investigations including soil samples, shovel tests and other site specific investigations for previously unidentified sites will be conducted. The Second Tier studies will also identify whether there are potentially affected buildings and structures that are not currently registered historic sites but may be eligible for the NRHP. These surveys will identify whether the Identified Preferred Strategy is likely to affect the architectural or archaeological cultural resources and how these effects will be addressed.

How Will Cultural Resource Found in the Study Area Be Protected?

The Second Tier studies will identify any needed measures to avoid, minimize, or mitigate cultural resource impacts. This will include preparation of any documentation required under Section 4(f) of the Department of Transportation Act or Section 6(f) of the National Historic Preservation Act.

In the event that a potential cultural resource is found during the construction phase of the project, the project should temporarily cease, while a cultural investigation is conducted and the appropriate agencies are contacted and the NRHP significance of the cultural resource evaluated.



Draft EIS - Affected Environment and Environmental Consequences

Figure 3.9.1 Cultural Resources Map

3.10 Noise

This section discusses the potential effects of improvements to I-70 on noise levels in the Study Area. Studies have shown that some of the most common sources of urban and rural noise are associated with transportation. Traffic noise is one of the most dominant concerns expressed by the public during development and expansion of transportation systems.

In 1982, the Federal Highway Administration (FHWA) established guidance under Title 23 of the Code of Federal Regulations, Part 772 to evaluate the effects of highway traffic noise. This guidance commonly known as 23 CFR 772 provides guidelines for highway noise mitigation and abatement. To conform to 23 CFR 772, the Missouri Department of Transportation (MoDOT) created their own Traffic Noise Policy in 1972. MoDOT's policy provides guidance for determining the feasibility and need of noise abatement measures. FHWA has approved MoDOT's Traffic Noise Policy.

Fundamentals of Noise

Noise is generally referred to as a loud, surprising, irritating, or unwanted sound. Sound is caused by vibrations of air molecules given off when an object moves. The vibrations travel through the air like ripples on water until they eventually lose energy. When the vibrations reach a human's ear, they hear what is called sound.

The strength of sound is measured with a metering instrument that uses units called "decibels". A decibel (dB) is a logarithmic unit that is the ratio of a sound pressure level to a standard reference level. Sound is measured on a logarithmic scale because the human ear is responsive to an intense range of frequencies; therefore, the sensitivity of the ear is more logarithmic than linear.

The decibel scale is very useful but it can be somewhat confusing since the mathematical operations differ from the normal arithmetic scale. On a logarithmic scale the sound combined from two identical noise sources will create a 3 dBA increase over the sound created from one source operating

What is meant by a Logarithmic Scale?

Since decibels are measured on a logarithmic scale, noise levels do not follow a linear progression. A doubling of noise energy creates an actual increase of about 3 dBA. For example, if one source of noise is at a 50 dBA level, a doubling of the noise intensity (two identical 50 dBA sources) would create a combined level of about 53 dBA, not 100 dBA.

What is dBA?

Since sound is made up varying frequencies, sound level meters will use the weighting system to filter out frequencies the human ear cannot detect. The most common filter is called the A-weighted scale and is expressed as "dBA".

I-70 First Tier EIS 3.10-1

alone. In other words, two 50 dBA sources together would result in a sound measuring 53 dBA, not 100 dBA. Also on a logarithmic scale, an increase or decrease of 10 dBA in sound level is perceived as a doubling or halving of sound to a listener. For example, a sound level of 50 dB will be heard as twice as loud as a sound level at 40 dBA, but only half as loud as a sound level at 60 dBA.

When considering highway noise, an adjustment or weighting of high and low frequencies is made to approximate how the average human hears sounds. Since sound is made up varying frequencies, sound level meters will use the weighting system to filter out frequencies the human ear cannot detect. The most common filter is called the A-weighted scale and is expressed as "dBA". **Table 3.10.1** shows examples of noise levels associated with highways and other common activities in dBA.

Highway noise is not constant; it varies over time with the number, type, and speed of the vehicle which produces the noise. To measure the changing levels of noise, a calculated average is found that represents the steady-state noise level during any given amount of time. This calculated average is referred to as the *equivalent sound level*, or Leq, and represents low and high noise levels averaged over a given time period.

One of the most commonly used descriptors of noise is described as $L_{\rm eq}$ (h) or hourly $L_{\rm eq}$. This represents an average A-weighted sound level over one hour. An additional descriptor sometimes used is called $L_{\rm 10}$ and represents an A-weighted sound level that is exceeded 10 percent of the time. The hourly $L_{\rm eq}$ is the most common descriptor of highway noise used by many state highway agencies and the FHWA.

3.10-2 Noise

Table 3.10.1 Illustrated Comparison of Noise Levels

COMMON SOUND/NOISE LEVELS						
Outdoor	dBA	Indoor				
	110	Rock band at 5 meters				
Jet flyover at 300 meters						
Pneumatic hammer	100	Subway train				
Gas lawn mower at 1 meter						
_	90	Food blender at 1 meter				
Downtown (large city)	80	Garbage disposal at 1 meter				
		Shouting at 1 meter				
Gas Lawn mower at 30 meters	70	Vacuum cleaner at 3 meters				
Commercial area		Normal speech at 1 meter				
Air conditioning unit	60	Clothes dryer at 1 meter				
Babbling brook		Large business office				
Quiet urban (daytime)	50	Dishwasher (next room)				
Quiet urban (nighttime)	40	Library				
_	30	<u> </u>				
	20	_				
	10	<u> </u>				
_	0	Threshold of hearing				

Source: Guidelines for Analysis and Abatement of Traffic Noise, TxDOT, 1996.

What are the Sources of Highway Noise in the Study Area?

Highway noise depends largely on three things: (1) the volume of traffic, (2) the speed of the traffic, and (3) the number of trucks in the traffic flow. Highway noise will increase with heavier traffic volumes, higher speeds, and a greater numbers of trucks on the highway. The noise is typically produced from a vehicle's engine, exhaust, and tires. However, the loudness of highway noise can be increased by a vehicle's faulty equipment and defective mufflers. In addition,

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any condition such as a steep incline that causes heavy use of motor engines will also increase vehicle noise levels along the highway.

How are Noise Impacts Determined?

The FHWA developed noise abatement criteria (NAC) to measure highway noise levels and determine if the noise levels are compatible with surrounding land uses. The NAC is shown in **Table 3.10.2**. A noise impact occurs when predicted traffic noise levels "approach or exceed" the applicable noise abatement criteria or "substantially exceed" existing noise levels.

Approaching the NAC is defined as being within one dBA of the applicable NAC category. For example, all properties covered in NAC Category B (generally residential) that have a calculated Leq of 66 dBA or higher would "approach or exceed" the 67 dBA NAC Category B criterion. Therefore, the Leq value of 66 dBA for NAC Category B is used as a threshold value for determining existing and future noise impacts. The FHWA gives each individual state highway agency the authority to create their definition of "substantial". The MoDOT Traffic Noise Policy considers any noise level greater than or equal to 15 dBA increase over existing levels as being substantial.

3.10-4 Noise

Table 3.10.2 Noise Abatement Criteria (NAC) Hourly Weighted Sound Level in Decibels (dBA)*

Activity	Leq (h) dBA	Description of Activity Category		
Category				
A	57	Lands on which serenity and quiet are of extraordinary		
	(exterior)	significance and serve an important public need and		
		where the preservation of those qualities is essential if the		
		area is to continue to serve its intended purpose.		
В	67	Picnic areas, recreation areas, playgrounds, active sports		
	(exterior)	areas, parks, residences, motels, hotels, schools, churches,		
		libraries, and hospitals.		
С	72	Developed lands, properties, or activities not included in		
	(exterior)	categories A or B above.		
D	-	Undeveloped lands.		
E	52	Residences, motels, hotels, public meeting rooms, schools,		
	(exterior)	churches, libraries, hospitals, and auditoriums.		
*Either hourly Lea or Lio (but not both) may be used on a project.				

^{*}Either hourly Leq or L10 (but not both) may be used on a project.

Source: 23 CFR 722, U.S. Department of Transportation, Federal Highway Administration, 1982.

Are there any Noise-Sensitive Land Uses in the Study Area?

The I-70 Study Area contains many noise-sensitive land uses, most of which would be categorized under NAC Category B (generally residential). Each noise-sensitive land use was identified during a Study Area drive through and analyzed using Geographic Information System (GIS) technology. The following paragraphs briefly provide a quantitative list of all noise-sensitive land uses in the Study Area. Because the Study Area is quite large, the list of land uses is divided into five Sub-Areas.

LEEVAVOUKOS ART CENTER

Leedy Volkos Art Center

Downtown Sub-Area

The identified noise-sensitive land uses include 12 park or recreation areas, three hotels or motels, five schools, one university, 12 churches, 29 community or cultural facilities, and numerous residential buildings.



Sycamore Hills Elementary School

Urban Sub-Area:

The identified noise-sensitive land used include two park or recreation areas, one university, 39 churches, 15 community or cultural facilities, one cemetery, and numerous residential buildings.

I-435 Sub-Area

The identified noise-sensitive land uses include one park or recreation area, seven hotels or motels, two universities, two churches, one community or cultural facility, and numerous residential buildings.

Suburban Sub-Area

The identified noise-sensitive land uses include one park or recreation area, five hotels or motels, five schools, five churches, one community or cultural facility, and numerous residential buildings.

I-470 Sub-Area

The identified noise-sensitive land uses include two park or recreation areas, three hotels or motels, two churches, and numerous residential buildings.

How will the Strategies for I-70 Affect Noise Levels?

In this First Tier Study, detailed noise modeling was not completed for the strategies. The Study Team did count the number of noise receptors within 150 feet of each of the proposed strategies. The Study Team considered relocations prior to summing the impacted noise receptors. For example, a relocated noise receptor would no longer be impacted by noise while the receptor across the street may not be within 150 feet of the strategy. As a result, the impacted noise receptors would be decreasing as the roadway scenario footprints are increasing. These receptors would be the most likely to experience the effects of increased noise levels.

3.10-6 Noise

No-Build Strategy

The No-Build Strategy may increase noise levels for existing residences and businesses along I-70 as traffic and congestion continues to grow over time. For a comparison, the noise receptors adjacent to the existing highway were estimated in **Table 3.10.3**.

Table 3.10.3 Existing Noise Impacts

	Residential	Commercial	Community Facilities
Downtown Sub-Area	34	32	12
Urban Sub-Area	164	42	6
I-435 Sub-Area	42	18	1
Suburban Sub-Area	232	24	2
I-470 Sub-Area	44	8	3
Total	516	124	24

<u>Improve Key Bottlenecks Strategy</u>

Noise levels may increase for residents and businesses along the corridor with the Improve Key Bottlenecks Strategy. By improving the bottlenecks, more traffic will be able to move along I-70 at a higher rate of speed, increasing the noise levels. The areas likely to be affected the most are the residential areas in the Urban and Suburban Sub-Areas that are next to I-70. These Sub-Areas have a high concentration of residences both single-family and multi-family that are located close to the existing I-70 right of way. However, the Improve Key Bottlenecks Strategy noise impacts would affect fewer residences, businesses, and community facilities than the No-Build Strategy. Table 3.10.4 lists the number of residences, businesses, and community facilities that are within 150 feet of the proposed improvements and have the highest probability of an increase in noise levels from the Improve Key Bottlenecks Strategy.

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Table 3.10.4 Improve Key Bottlenecks Noise Impacts

	Residential	Commercial	Community Facilities
Downtown Sub-Area	29	25	12
Urban Sub-Area	129	25	5
I-435 Sub-Area	32	10	0
Suburban Sub-Area	155	11	1
I-470 Sub-Area	24	5	2
Total	369	76	20

The majority of community facilities within 150 feet of the proposed improvements are park and recreation areas, but it also includes one community center, seven churches, one school, and a homeless assistance facility.

Add General Lanes Strategy

The Add General Lanes Strategy is expected to increase noise levels for some residents and businesses near I-70. increasing capacity on I-70, more traffic will be able to move through the Study Area at a higher rate of speed, increasing the noise levels. Like the Improve Key Bottlenecks Strategy, this strategy will likely affect the residential areas next to I-70 in the Urban and Suburban Sub-Areas the most. However, because this strategy will require more relocations, see Section 3.4, there are fewer residences, businesses, and community facilities within 150 feet of the proposed improvement that would be affected by noise than the No-Build or Improve Key Bottlenecks Strategies. Table 3.10.5 lists the number of residences, businesses, and community facilities that are within 150 feet of the proposed improvement and have the highest probability of an increase in noise levels from the Add General Lanes Strategy.

3.10-8 Noise

Table 3.10.5 Add General Lanes Noise Impacts

	Residential	Commercial	Community Facilities
Downtown Sub-Area	24	22	11
Urban Sub-Area	74	18	5
I-435 Sub-Area	28	6	1
Suburban Sub-Area	105	27	1
I-470 Sub-Area	6	5	2
Total	237	78	20

<u>Transportation Improvement Corridor Strategy</u>

The Transportation Improvement Corridor Strategy is expected to increase noise levels for some residents and businesses near I-70. Like the other Build Strategies, this strategy will likely impact the residential areas next to I-70 in the Urban and Suburban Sub-Areas the most. However, because this strategy will cause more relocations, see **Section 3.4**, there are fewer residences, businesses, and community facilities within 150 feet of the proposed improvement impacted by noise than the other Build Strategies. **Table 3.10.6** lists the number of residences, businesses, and community facilities that are within 150 feet of proposed improvement that have the highest probability of an increase in noise levels from the Transportation Improvement Corridor Strategy.

Table 3.10.6 Transportation Improvement Corridor Noise Impacts

	Residential	Commercial	Community Facilities
Downtown Sub-Area	29	29	11
Urban Sub-Area	72	8	5
I-435 Sub-Area	35	4	1
Suburban Sub-Area	66	4	1
I-470 Sub-Area	10	5	2
Total	212	50	20

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<u>Identified Preferred Strategy</u>

The Identified Preferred Strategy is expected to increase noise levels for some residents and businesses near I-70 as traffic will be able to move at a higher rate of speed, increasing the noise levels. The areas likely to be impacted the most are the residential areas in the Urban and Suburban Sub-Areas that are next to I-70. These Sub-Areas have a high concentration of residences both single-family and multi-family that are located close to the existing I-70 right of way. **Table 3.10.7** lists the number of residences, businesses, and community facilities that are within 150 feet of the proposed improvements and have the highest probability of an increase in noise levels from the Identified Preferred Strategy. The noise assessment is based on the widest potential footprint between east of I-435 and I-470.

Table 3.10.7 Identified Preferred Strategy Noise Impacts

	Residential	Commercial	Community Facilities
Downtown Sub-Area	29	25	12
Urban Sub-Area	129	25	5
I-435 Sub-Area	32	10	1
Suburban Sub-Area	105	27	1
I-470 Sub-Area	6	5	2
Total	301	92	21

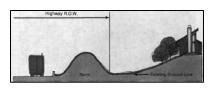
The majority of community facilities within 150 feet of the proposed improvements are park and recreation areas, but it also includes one community center, seven churches, one school, and a community assistance facility.

How will Noise Levels be Assessed and Mitigated in the Second Tier Studies?

The Second Tier studies will further evaluate and refine the noise impacts that the Identified Preferred Strategy will cause. As a part of the Second Tier studies, the Identified Preferred Strategy will be finalized and its footprint will be refined.

3.10-10 Noise

The MoDOT Noise Policy will dictate the evaluation and assessment methods used as the project proceeds. If a selected strategy requires significant changes in horizontal or vertical alignment or an increase in the number of through lanes, then noise measurements and modeling will be completed using FHWA approved models and a preliminary assessment of needed mitigation will occur. The use of noise abatement measures such as walls and berms will be assessed if mitigation of noise is needed as indicated by measurement and modeling.



FHWA Drawing showing an Earth Berm



FHWA Drawing showing an Earth Berm with a Noise Wall

3.11 Air Quality

This section discusses the potential affects of I-70 improvements on air quality. Air quality is regulated by the U.S. Environmental Protection Agency (EPA) under jurisdiction of the Federal Clean Air Act of 1970 and its amendments. Three sets of air pollutants would be of concern with regards to the I-70 FTEIS: Criteria pollutants regulated under the National Ambient Air Quality Standards (NAAQS), Mobile Source Air Toxics (MSATs), and general carbon emissions from motor vehicles.

What are the National Ambient Air Quality Standards (NAAQS)?

The NAAQS were formulated to protect public health, safety, and welfare from known or anticipated air pollutants. The most recent amendments to the Clean Air Act contain criteria for sulfur dioxide (SO₂), particulate matter (PM₁₀, ten-micron, and smaller; and PM_{2.5}, 2.5 micron, and smaller) carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), and lead (Pb). **Table 3.11.1** shows the NAAQS as of December 2008.

Locations that do not meet these standards are designated by the EPA as "nonattainment" areas for each pollutant that does not meet the standards. Amendments to the Clean Air Act have established time schedules for the states to reduce pollutant levels to comply with the NAAQS in nonattainment areas.

For transportation projects, ground-level ozone, carbon monoxide, and particulate matter are the most important pollutants to consider. These pollutants are monitored on a regional level from several stations around the Kansas City Metropolitan Area.

What Measuring Units are Used for Air Quality Measurements?

When chemical compounds are in tiny concentrations, they are often represented with one of the following:

Parts Per Million (ppm): This is a ratio of the number of molecules of a pollutant compared to a million molecules of air. So 3 ppm concentration of CO means 3 CO molecules per million air molecules.

Parts Per Billion (ppb): This is a ratio of the number of molecules of a pollutant compared to a billion molecules of air.

Micrograms (µg): A microgram is a millionth of a gram. µg/m³ is shorthand for micrograms per cubic meter. (Similarly, mg/m³ is milligrams per cubic meter; one thousandth of a gram.)

Microns: are millionths of a meter. The classes of particulate pollution of concern are particulate matter smaller than ten microns in size (PM₁₀) and particulates smaller than 2.5 microns in size (PM_{2.5}).

Table 3.11.1 National Ambient Air Quality Standards (NAAQS) as of December 2008

Pollutant	Averaging Time	Primary Standard ¹	Secondary Standard ²
	Annual (Arithmetic	0.03 ppm (80 μg/m ³)	
Sulfur Dioxides (SO ₂)	Mean)		
Sulful Dioxides (302)	24 – Hour	0.14 ppm (365 μg/m³)*	
	3 – Hour		0.5 ppm (1300 μg/m ³)*
	Annual (Arithmetic	15 μg/m ³	Same as Primary
Particulate Matter (PM 2.5)	Mean)		
	24 – Hour	35 μg/m ³	Same as Primary
Particulate Matter (PM 10)	24 – Hour	150 μg/m ^{3*}	Same as Primary
	8 – Hour	9 ppm (10 mg/ m³)*	No Secondary
Carbon Monoxide			Standard
Carbon Monoxide	1 – Hour	35 ppm (40 mg/ m ³)*	No Secondary
			Standard
Ozono (Or)	8 – Hour ³ (1997 std)	0.08 ppm (157 μg/m³)	Same as Primary
Ozone (O ₃)	8 – Hour (2000 std)	0.075 ppm	Same as Primary
Nitrogen Dioxide (NO2)	Annual (Arithmetic	0.053 ppm (100	Same as Primary
	Mean)	μg/m ³)	
Lead (Pb)	Quarterly Average	1.5 μg/m ³	Same as Primary

¹ Primary Standard means the level of air quality, which provides protection for public health with an adequate margin of safety.

Ozone

Ozone is of substantial concern for transportation projects in the Kansas City region. Ozone occurs naturally in the upper levels of the atmosphere, about ten to 30 miles above the earth's surface and blocks out harmful ultraviolet radiation from the sun. However, ground-level ozone is a man-made pollutant that irritates the respiratory system and can cause serious health problems.

Ground-level ozone forms when volatile organic compounds (VOC) mix with nitrogen oxides in the presence of heat and sunlight. Both VOC and nitrogen oxides are products of vehicle exhausts among other sources and thus of concern on highway projects that may encourage additional driving and/or reducing congestion and vehicle idling.

² Secondary Standard means the level of air quality, which may be necessary to protect welfare from unknown or anticipated adverse effects.

³ The 8 – hour primary and secondary are met when the 3-year average of the 4th highest average concentration is less than or equal to 0.08 ppm (1997 std).

^{*} Concentration not be exceeded more than once per year.

^{*} Source: United Environmental Protection Agency, <u>www.epa.gov/air/criteria.html</u>, December 2008

EPA's eight-hour ozone standard of 0.075 parts per million (ppm) is designed to protect against longer ozone exposure periods. The one-hour primary standard was revoked by the EPA June 15, 2005. As the existing environmental regulations are modified or new environmental regulations are put in place, MoDOT will address those ramifications for this study accordingly. The effects of new air quality regulations may be addressed in the final FTEIS or the second tier documents depending on when the new regulations go into effect.

Carbon Monoxide and Particulate Matter

Although ozone concentrations are of substantial concern in the Kansas City region, projects developed along I-70 will also have to undergo other air quality analyses. Traffic volumes on all segments of I-70 already exceed the threshold of an average daily traffic volume of 54,000 for federally funded projects that require a detailed air quality analysis according to an interagency agreement developed by MoDOT, Missouri Department of Natural Resources (MoDNR) and FHWA. This analysis would likely include detailed modeling of expected emissions and concentrations of carbon monoxide and particulate matter at worst case locations along proposed improvements.

Carbon monoxide is a colorless and odorless gas which is the product of incomplete combustion, and is the major pollutant from gasoline-fueled motor vehicles. Carbon monoxide is harmful because it reduces oxygen delivery to the body's organs and tissues. It is most harmful to those who suffer from heart and respiratory disease. Carbon monoxide emissions are greatest from vehicles operating at low speeds and prior to complete engine warm-up (within approximately eight minutes of starting), particularly in colder winter months. Congested urban intersections tend to be the principal problem areas for carbon monoxide.

Particulate matter is the term for solid or liquid particles suspended in the air. Some particles are large or dark enough to be seen as soot or smoke, but fine particulate matter is generally not visible to the naked eye. Two types of particulate matter are of concern. PM₁₀ (ten microns or smaller) particulates are coarse particles, such as windblown

What Other Vehicular Air Pollutants are covered by the NAAQS but not Discussed at Length?

Lead: Lead (Pb), a toxin, has steadily declined since the 1970s with the introduction of unleaded fuels

VOC: Volatile Organic Compounds (VOC) come from vehicles and industrial sources. The term VOC encompasses thousands of compounds, including petroleum constituents as well as industrial thinners, solvents, etc. VOC are of interest primarily from their role in ozone formation, a regional pollutant and a precursor of PM_{2.5}.

NO_x: The term "Oxides of Nitrogen" (NO_x) covers a number of chemical compounds containing both nitrogen and oxygen. Like VOC, NO_x also are ozone and PM_{2.5} precursors and are generated by motor vehicles. NO₂ (nitrogen dioxide) is a specific type. NO (nitric oxide) is also an irritant and ozone precursor, which reacts with oxygen to form NO₂.

SO₂: SO₂ (sulfur dioxide) is the main product from the combustion of sulfur compounds. It is produced by volcanoes and in various industrial processes. Since coal and petroleum contain various amounts of sulfur compounds, their combustion generates SO₂.

What Air Toxics are of the Most Concern?

Six air toxins have been called out as "priority toxins":

Benzene is a known human carcinogen.

Acrolein's carcinogenicity has not been determined based on inadequate data on oral inhalation exposure

Formaldehyde is a probable human carcinogen, based on limited evidence in humans, and sufficient evidence in animals.

1,3-butadiene is carcinogenic to humans by inhalation.

Acetaldehyde is a probable human carcinogen based on tumors in lab rats and hamsters after inhalation exposure.

Diesel exhaust (DE) is likely to be carcinogenic to humans by inhalation. DE is the combination of diesel particulate matter and diesel exhaust organic gases. DE is also likely associated with chronic respiratory and pulmonary problems.

dust from fields and unpaved roads. PM_{2.5} (2.5 microns or smaller) covers finer particulates smaller than 2.5 microns in size. PM_{2.5} particulates are generally emitted from activities such as industrial and residential combustion and from vehicle exhaust. PM_{2.5} is a health concern because fine particles can reach the deepest regions of the lungs. Health effects include asthma, difficult or painful breathing, and chronic bronchitis, especially in children and the elderly.

What are Mobile Source Air Toxics (MSATs)?

MSATs are becoming an air quality issue of increasing concern for major transportation projects. MSATs are a subset of the 188 air toxics defined by the Clean Air Act. MSATs are compounds emitted from highway vehicles and non-road equipment. Some are present in fuel and are emitted to the air when the fuel evaporates or passes through the engine unburned. Others are emitted from the incomplete combustion of fuels or as secondary combustion products. Metal air toxics also result from engine wear or impurities in oil or gasoline.

The EPA and other agencies have several programs to improve gasoline and lower vehicle emissions. These programs are helping to lower the sulfur content of fuel, especially diesel fuels, and are lowering the emissions of key MSATs. Between 2000 and 2020, FHWA projects that even with a 64 percent increase in vehicle miles traveled (VMT), these programs will reduce on-highway emissions of key MSATs by 57 to 87 percent.

On February 3, 2006 FHWA issued <u>Interim Guidance of Air Toxic Analysis in NEPA Documents</u>, which outlines procedures for addressing air toxic analysis in the absence of a comprehensive and technically sound modeling approach. Improvements to I-70 will require MSATs analysis that conforms to these guidelines and any future requirements for MSATs analysis.

Why are Carbon Emissions from Vehicles a Concern?

The burning of fuel by vehicles releases carbon dioxide, a greenhouse gas, into the atmosphere. Greenhouse gases trap heat in the atmosphere, which contributes to climate change. Decreasing the time vehicles spend on I-70 because of congestion and delays will decrease the amount of CO₂ released into the atmosphere. During the Second Tier studies new emissions standards may be in effect and will be considered.

What is the Current Status of Air Quality?

The Kansas City area air quality monitoring region is currently designated a maintenance area for ozone. This includes Platte, Clay and Jackson counties in Missouri. However, the region's attainment status for ozone may be removed in 2009 and 2010 due to exceeding the current standard for ozone and future more stringent standards for eight-hour ozone concentrations. The Kansas City region has a history of not meeting ozone In 1978, the EPA designated the region as standards. nonattainment for ground level ozone. The region did not meet the ozone standards in place at the time until 1992. Intermittent violations continued to occur throughout the 1990s. In 1997, the EPA introduced a new, more stringent health based standard for ground level ozone. This standard established an upper limit of 0.08 parts per million over an eight-hour period. Due to EPA rounding conventions a reading below 0.085 ppm meets the standard. Under the EPA guidelines, the three-year average of the fourth highest reading at any single air quality monitor in the region cannot exceed 0.085 ppm. The three year average value is also called the design value. The Kansas City region avoided exceeding the standard in the mid-2000s primarily due to cool summers. In June 2007, the area had a violation of the 0.8 ppm ozone standard at the Rock Creek monitor.

On March 12, 2008, the EPA announced that it was tightening the primary eight-hour ozone standard to 0.075 ppm or 75 ppb. This means that design values of 0.08 ppm will represent exceeding of the new standard. As this standard is being reconsidered, the current implementation schedule is subject to change. Under the Clean Air Act, states were required to

submit recommendations for non-attainment areas under these new standards by March 2009. EPA will make nonattainment designations in March 2010. States must have approved state implementation plans to address nonattainment areas in 2013 and areas will be required to meet the new standard between 2013 and 2020.

Part of the new regulations will include compliance of the soon to developed 2040 Long Range Transportation Plan (LRTP) with targets for regional emission reductions. Individual proposed projects such as improvements on I-70 will be required to demonstrate through air quality modeling that they conform to the Long Range Transportation Plan's emission forecasts and requirements. In addition, the Long Range Transportation Plan has to conform to the State Implementation Plan and its emission budgets. MARC has continued to do conformity analyses for projects because of the continued likelihood of future violations of air quality standards. However, with a non-attainment designation and the more stringent ozone standards, the overall emission goals of the LRTP may become more restrictive on the types of future transportation improvements allowed. Priority and funding will flow towards projects that reduce congestion and reduce vehicle miles traveled in order to reduce emissions. Future I-70 improvements will require clearance within this more restrictive regulatory environment.

In 2005, the Mid-America Regional Council (MARC) and its partners prepared a <u>Clean Air Action Plan</u> (CAAP) which represented a comprehensive, community-based voluntary strategy for reducing ground-level ozone pollution in the Kansas City Metropolitan Area. A key purpose of the plan was to help keep the region in compliance with air quality standards, especially ozone.

Monitor readings in 2008 indicate that Kansas City has violated the new eight-hour standard for ozone of 75 ppb, but not the existing standard of 80 ppb. **Table 3.11.2** lists the fourth highest values and the design values for ozone concentrations at monitors in the Kansas City region.

As **Table 3.11.2** shows, the 2006-2008 design values exceed the 75 ppb standard for eight-hour ozone at the Liberty, Watkins Mill, Rocky Creek, and Trimble monitors.

Table 3.11.2 Fourth-High Readings and Design Values, 2003-2008

						Design	1 Values	s - 3-Year	Average	
	Four	th-Hig	h Eight	-Hour V	Values ((PPB)	(PPB)			
Station	2003	2004	2005	2006	2007	2008	03-05	04-06	05-07	06-08*
Liberty	88	71	88	93	81	66	82	84	87	80
Watkins Mill	85	67	79	91	73	69	77	79	81	77
Rocky Creek	88	69	87	87	89	69	81	81	87	81
Richards-Gebaur	82	61	81	78	72	66	74	73	77	72
Trimble	N/A	71	87	85	83	70	N/A	81	85	79
JFK (KCK)	84	63	79	81	73	63	75	74	77	72
Heritage Park	81	66	81	76	71	62	76	74	76	69
Leavenworth	82	67	77	73	80	64	75	72	77	72

Source: 2008 Ozone Season Report for the Kansas City Region, Mid-America Regional Council

Based on 2008 monitoring, the Kansas City region is unlikely to be able to meet the new standard by 2009/2010. This means the EPA may designate the region as nonattainment and a new regulatory plan for reducing emissions could be put in place. A new regulatory plan could substantially affect the Strategies developed and the requirements for environmental clearance for future improvements to I-70.

Potential improvements to I-70 would also need to be evaluated for temporary construction related emissions that could affect concentrations of ozone, carbon monoxide, and particulate matter including fugitive dust.

How will the Strategies Affect Air Quality?

Both VOC and nitrogen oxides are ingredients in ozone formation. VOC emissions increase when cars are sitting in traffic while NOx emissions increase when traffic speeds are high and consistent. An increase in traffic flow would cause a higher emission of NOx and could worsen ozone levels in the Kansas City metropolitan area.



Locations of Air Quality Monitors

^{*}The 2008 eight-hour monitored ozone readings have not been quality assured and may contain errors. Readings in **bold** represent design values above the 75 ppb standard.

No-Build Strategy

The No-Build Strategy will be worse for air quality when compared to any of the Build Strategies. This is due to an increase in traffic, congestion, and delays in the No-Build Strategy. Although the No-Build Strategy would be worse for air quality than any of the Build Strategies, air quality will likely improve over time due to improvements in vehicle efficiency and reduction in emissions between now and 2030.

<u>Improve Key Bottlenecks Strategy</u>

The Improve Key Bottlenecks Strategy is expected to maintain air quality by removing the existing bottlenecks which create congestion and stop and go traffic flows. The improved traffic flow will allow vehicles to move more efficiently. In addition, vehicle efficiencies and emission reductions will help to improve air quality over time.

Add General Lanes Strategy

The Add General Lanes Strategy is expected to maintain air quality by improving the traffic flows which will allow vehicles to move more efficiently. The Add General Lanes Strategy also indicates a moderate increase in the number of vehicles using the corridor compared to the No-Build or the Improve Key Bottlenecks Strategy. Increased vehicle use along I-70 may offset some of the benefits from reduced congestion and improvement in vehicle emissions. In addition, vehicle efficiencies and emission reductions will help to improve air quality over time.

<u>Transportation Improvement Corridor Strategy</u>

The Transportation Improvement Corridor Strategy is expected to maintain air quality by removing the existing bottlenecks which create congestion and stop and go traffic flows. In addition, a separated transportation corridor between the downtown loop and east of Lee's Summit Road would also assist in improved traffic flows. Vehicle efficiencies and emission reductions will help to improve air quality over time. However, the Transportation Improvement Corridor Strategy also indicates a moderate increase in the

number of vehicles using the corridor compared to the No-Build or the Improve Key Bottlenecks Strategy. Increased vehicle use along I-70 may negate some of the air quality benefits from reduced congestion and improvement in vehicle emissions.

Identified Preferred Strategy

The Identified Preferred Strategy is expected to improve air quality by removing existing bottlenecks which create congestion and stop and go traffic flows. The improved traffic flow will allow vehicles to travel more efficiently. In addition, anticipated vehicle fuel mileage efficiency increases and emission reductions will also improve air quality over time. Depending on the options selected for the Identified Preferred Strategy in the Second Tier studies, a moderate increase in the number of vehicles on I-70 is possible. Increase vehicle use along I-70 may negate some of the air quality benefits.

What are the Next Steps in Analyzing Air Quality?

The Second Tier studies will finalize the improvement strategy between east of I-435 and I-470. The Second Tier studies will further evaluate the impacts the Identified Preferred Strategy will have on air quality and will include air quality modeling using FHWA improved model and conformance analysis through MARC. In addition, the Second Tier studies will further consider the affects of the project on carbon and other green house gas emissions per anticipated guidelines.

3.12 Groundwater, Drainage, and Surface Water Quality

This section presents the effects of the strategies on the groundwater, drainage, and surface water quality within the Study Area.

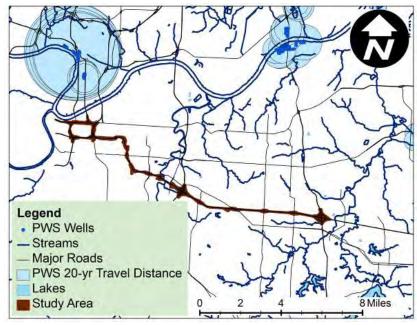
What is the Status of Groundwater Quality within the Study Area?

The Missouri Department of Natural Resources (MoDNR) provided information on the quality of the groundwater in the Study Area. The Study Area is located above a groundwater aquifer. The groundwater aquifers in the vicinity of the Study Area yield water that is too salty for domestic use. Drinkable groundwater in West-Central Missouri is scarce.

Where Do Communities Get Water to Drink?

MoDNR published the locations of <u>Public Water Supply Wells</u> and related <u>Estimated Groundwater Travel in 20 Years</u> in the form of data files on July 28, 2008. This data shows the sensitive areas around public supply wells, referred to as "well-head protection zones," which should be protected from contamination to ensure a safe water supply. This data was obtained and analyzed with respect to the Study Area to identify potential affects to local water supply aquifers.

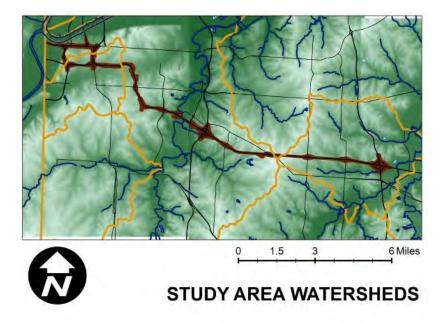
Due to the deep saline groundwater aquifer, there are no municipal or community wells within the Study Area. A review of the MoDNR public water supply well locations shows no well-head protection zones intersect the Study Area. All local public water supply well heads are located near the surface, within the floodplain of the Missouri River. These water supply wells are shallow and fed by the Missouri River. Contamination of the deep saline aquifers would have no consequences on human health. However, the deep saline aquifers are sealed from surface water by water-tight geological formations which prevent contamination from the surface.



Public Water Supply Wells

What are the Potential Effects of Highways on Local Groundwater Resources?

Highway operations could contaminate the river system with oil, grease, fuel, anti-freeze, and trash. Potentially the shallow water supply wells along the Missouri River might subsequently become contaminated. However, the movement of water from the river to the wellheads is slow (it takes more than 20 years based on the estimated 20-year groundwater travel zones). If a large volume of contaminate is released into the river system from I-70, its progress could be monitored, its toxicity neutralized, and mitigation measures implemented long before the contaminate can enter the water supply.



What are the Surface Waters in the Study Area?

The Study Area intersects a part of the watersheds of the Blue River, Little Blue River, Kansas River, and Missouri River. The Study Area is contained in the southwestern portion of the MoDNR watershed area called "Missouri River Mainstem Kansas City to Glasgow."

A watershed is the area drained by a segment of stream or river. The water quality of a stream or river segment is largely determined by what is in its watershed.

What Other Water Bodies are found within the Study Area?

There are no significant lakes within the Study Area. However, there are a few small wetlands areas, including small ponds, which are identified and described in **Section 3.14 Wetlands**. Except for wetlands in **Section 3.14**, the potential for contamination of ponds and lakes is small due to the location of the Study Area.

What is a "TMDL?"

According to the U.S. **Environmental Protection** Agency, Total Maximum Daily Load (TMDL) is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources." Discharge standards are allocated based on maintaining the total of all sources, natural and manmade, less than the TMDL for each pollutant.

What is E. coli?

Escherichia coli (abbreviated as E. coli) are a diverse group of bacteria that live in all warm blooded animal's intestines. Some kinds of E. coli are used as markers for water contamination. E. coli are not themselves harmful, but indicate the water is contaminated.

What are the Beneficial Uses of Surface Waters in the Study Area?

Listings of the beneficial uses of stream segments were provided in the Total Maximum Daily Load (TMDL) documentation by MoDNR.

The beneficial uses of the Missouri River downstream of the Study Area include:

- Livestock and wildlife watering
- Protection of aquatic life and human health
- Fish consumption
- Whole body contact recreation
- Secondary contact recreation
- Irrigation
- Drinking water supply
- Industrial

The beneficial uses of the Blue River downstream of the I-70 crossing include:

- Livestock and wildlife water source
- Warm water aquatic life
- Human health associated with fish consumption
- Industrial water source
- Boating and canoeing

The beneficial uses of Little Blue River downstream of the I-70 crossing include:

- Livestock and wildlife watering
- Protection of warm water aquatic life
- Protection of human health associated with fish consumption

Are There Surface Water Concerns?

According to the MoDNR <u>Watershed Information Sheet for Missouri River Mainstem Kansas City to Glasgow</u>, there was a study of the Blue River that found high levels of E. coli bacteria which is an indication of wastewater contamination. Also reported in the Watershed Information Sheet was

impairment to the Missouri River and the Blue River due to chlordane in fish tissues. Chlordane is an insecticide, now banned, that is leached from treated soils around homes in urban areas.

Water quality data including E. coli counts were collected on the Blue River at Stadium Drive by the United States Geological Survey (USGS) during the recreational seasons of 2003 and 2004. The E. coli data indicated that the Blue River within the Study Area was impaired by bacteria.

What is the Quality of Stormwater Drainage in the Study Area?

Throughout the Study Area, habitat and flood zones have been modified by the construction of housing, commercial districts, urbanization, and the construction of the interstate highway system, especially I-70. The development in the drainage basins adjacent to the Study Area has altered the hydrology from its original mostly permeable forest and prairie to mostly impermeable urban and suburban surfaces. This has affected water quality. Water flows more quickly on paved surfaces increasing erosion and sediment movement. Lawn fertilizers, pesticides, and herbicides have also increased contamination. Septic systems and domestic animals have increased contamination from wastewater.

Runoff from the Study Area potentially drains directly into the Blue River. The Study Area crosses the Blue River approximately 7.2 stream miles upstream of the confluence with the Missouri River. The Blue River from the confluence with the Missouri River upstream for 22 miles is affected by urban runoff. Impairment includes bacterial contamination and chlordane contaminated fish.

Runoff from the Study Area potentially drains directly into the Little Blue River. According to the Missouri 303(d) report, the Little Blue River within the vicinity of the Study Area and downstream to the Missouri River, is contaminated with mercury from airborne deposition.

Runoff from the Study Area potentially drains into the Missouri River. According to the Missouri 303(d) report, the

What is sediment?

Sediment is small particles of dirt, dust, sand and other materials that are left behind on a surface after water flows over it.

Why does urbanization degrade water quality?

Urbanization, by definition, increases the density of human habitation. More humans in an area means more waste products are being generated in that area. In addition, human developments alter the natural landscape from prairie and forest, which are able to absorb and retain water, to streets. sidewalks and roofs which repel water. Water is no longer held and tends to "run-off" faster carrying contamination into the local drainage. Not only is more contamination generated in urban areas, contamination is carried to the drainage before it has a chance to decompose.

Missouri River is affected by urban runoff and is contaminated with chlordane in the vicinity of Kansas City, MO.

How Might The Strategies Affect Water Quality?

The proposed route for I-70 improvements is identical to the existing route. Consequently, the risks associated with any proposed improvement strategy include all the risks associated with the existing I-70 highway:

- Pollution of the river system as a result of fuel, oil, and debris carried from the road surfaces by stormwater runoff.
- Exposure of the river system to airborne particulates and combustion gases from traffic.

The Build Strategies, including the Identified Preferred Strategy, will increase the impervious surface and increase rainwater runoff. This leads to increased amounts of water flowing in the stream, especially during heavy rainfalls; less groundwater flowing through the soil (base flow); and more erosion of the stream bed because of faster flowing water. These changes to stream flow result in flooding; habitat loss; erosion, which widens the stream channel; and physical changes in how the stream looks and functions.

Traffic bottlenecks will be addressed by constructing more capacity, additional lanes, and wider bridges. Demolition and soil disturbance will create sediment which should be managed with carefully maintained sediment control practices. Bridgework will be over sections of rivers and floodplains which will require special diligence to prevent contaminants from entering the drainage and surface waters. Tributary crossings also require diligence to prevent sediment and contaminants from entering drainage and potentially entering water resources. Use of BMPs for the control of erosion and sedimentation is recommended at all construction sites.

Increases in projected traffic would contribute to the runoff pollutant load. Standard measures currently in place would be implemented to reduce impact to receiving waters during construction. The rebuild of the present facility would be

What is an impervious surface?

Impervious surfaces are hard surfaces such as asphalt, concrete, rooftops, and highly compacted soils that prevent rainwater from entering into the soil. The rainwater is forced to run off the land until it finds a place to enter the soil or enters a drainage system.

favorable for the implementation of present day best management practices regarding control and treatment of highway runoff to receiving waters. Grassy swales, detention basins and passive treatment systems may be implemented in the new design. Systems such as these may be placed in designated sensitive receptor areas.

What are the Potential Effects of Construction on Local Water Resources?

Movement of sediment and pollutants into the river system as a result of construction and demolition activities potentially will affect water quality and habitat during construction. Pollutants travel with and sometimes bind to sediment. Controlling sediment also controls pollution. Use of Best Management Practices (BMPs) for the control of erosion and sedimentation is recommended.

How Will Water Quality Be Addressed In the Second Tier Studies?

The Second Tier studies will further evaluate and refine the impacts of the Build Strategies on the groundwater, drainage, and surface water in the Study Area.

This will include concepts for best management practices regarding control and treatment of highway runoff to receiving waters drainage and highway runoff. The Second Tier studies will also identify potential measures to avoid and minimize affects on water quality.

3.13 Floodplains, Stream, and River Crossings

This section presents the benefits of floodplains, identifies the locations where the Study Area crosses or encroaches on floodways, streams, and rivers and reviews the potential effects of the strategies. Floodplains and streams are shown in **Figure 3.8.1** at the end of this chapter and on figures in the text in this section.

What are the Benefits of a Floodplain?

The benefits of the floodplains within the Study Area are:

- Reduction of downstream flooding by providing temporary space for flood water volumes.
- Reduction of downstream erosion by providing area for flood water to spread thereby dissipating energy.
- Provide opportunity for sediment removal by deposition.
- Provide temporary habitat for aquatic and semiaquatic species.

Highway construction activities in a floodplain should avoid reduction of the area and volume available for flood volume storage. Also, highway construction activities in a floodplain should not increase upstream flooding by increasing the depth of flooding. Aquatic habitat may be harmed by increasing the velocity of flood water through the floodway.

Who Is Responsible For Managing Activities In The Floodplain?

The State of Missouri delegated the responsibility of regulating floodplain management "designed to protect the health, safety, and general welfare" to local units of government. The Study Area is entirely contained within the jurisdictional boundaries of the City of Kansas City, MO and the City of Independence, MO. Both local units of government have adopted the recommended Federal Emergency Management Agency (FEMA) regulations for floodplain management.

What is a floodplain?

A floodplain is the relatively flat land adjacent to a stream or river that experiences occasional or periodic flooding.

The City of Independence and the City of Kansas City have adopted the following definitions and requirements:

What is a "100-year flood?"

The phrase "100-year flood" is a short way of saying "a flood with a high degree of probability of occurring in any 100-year period". The 100-year flood is equivalent to a 1% flood and both are used interchangeably.

How does development change floodways?"

Development directly affects floodways when it encroaches on floodway boundaries, narrowing the path water must follow. This occurs where developers are allowed to pave channel bottoms, fillin channel sides, or straighten water courses. Developments also reduce the amount of stormwater retainage by increasing hard surface coverings (asphalt, concrete, roofs). All of these changes increase the elevation, force, and damaging power of flood water.

- The base flood defined by the Federal Insurance Administrator's Flood Insurance Study (FIS), that is, "a flood which could be expected to have a one percent (1%) chance of occurrence in any one year".
- The regulatory floodway is the floodway required to convey the base flood without increasing flood height more than one foot. No development is permitted within the limits of the floodway that would cause any increase in flood height.
- The flood fringe is defined as the "area outside the floodway encroachment lines, but still subject to inundation by the base flood".

The regulations require that no permanent changes in the base flood elevations will be caused by any construction undertaken within the floodway boundaries. In particular, the regulations forbid changes within the designated floodway that increase flood height by more than one foot during a 100-year flood without mitigation measures, as determined by approved FEMA methods.

Where are the Floodplains and Regulatory Floodways in the Study Area?

There are three areas where the Study Area crosses regulated floodways and potentially affect floodplains of the river system:

- The Kansas and Missouri Rivers
- The Blue River
- The Little Blue River and an unnamed tributary

Figure 3.8.1 shows these locations. Throughout the Study Area, the natural habitat and flood zones have been modified by the construction of housing, commercial districts, urbanization, and the construction of the interstate highway system, especially I-70. The development in the drainage basins adjacent to the Study Area has altered the hydrology from its original forest and prairie to mostly paved urban and

suburban land resulting in changes to channel velocities and peak flood elevations.

What are the Risks of Encroachments on Floodways within the Study Area?

This section reviews each location where the proposed strategy packages for I-70 cross the floodplain or regulatory floodway with respect to:

- The risks associated with I-70 improvements within a floodplain.
- The effects on natural and beneficial floodplain values.

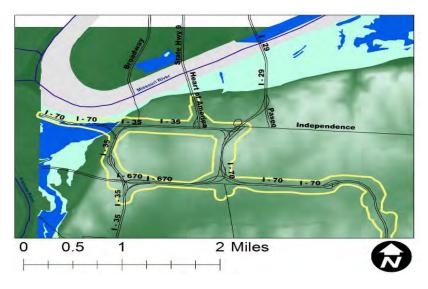
The proposed route for I-70 improvements is on the existing I-70 alignment. Consequently, the risks associated with the Identified Preferred Strategy include all the risks associated with the existing I-70 highway:

- Inundation by flooding, unless the road surface is elevated (as it currently is).
- Movement of sediment and pollutants into the river system as a result of construction and demolition activities.
- Pollution of the river system as a result of fuel, oil, and debris carried from the road surfaces by stormwater runoff.
- Exposure of the river system to airborne particulates and combustion gases from traffic.

Consideration should be given to minimizing the existing risks in the Build Strategies and implementing appropriate pollution control practices.

What is Inundation?

Inundation is the flooding of normally dry land.



Legend: Grey - floodway, blue - 100 year flood, light blue - 500 year flood

Missouri and Kansas Rivers Floodplain

Does the Study Area Encroach on the Kansas River and Missouri River Floodway?

The Study Area does not cross the regulated floodway of the Kansas River or the Missouri River, however, it does cross part of the flood fringe including areas subject to inundation by the 100-year and 500-year flood events. The area is currently crossed by a series of bridge spans, each greater than 20 feet. The Study Area is a fully developed industrial zone within the limits of the City of Kansas City, Missouri.

No new risks to the environment or floodplain are expected in the Study Area. However, care should be taken to minimize the existing risks.

Does the Study Area Encroach on the Blue River Floodway?

The project crosses the Blue River floodway which is approximately 1,716 feet wide at the centerline of the proposed alignment. The Study Area also includes fringe areas inundated by the 100-year flood and subject to inundation by the 500-year flood. The Blue River currently is crossed by a series of bridge spans each greater than 20 feet. The area within the Study Area is a developed urban zone within the limits of the City of Kansas City, MO.

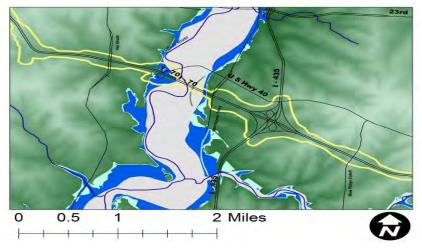
What is Floodway?

A floodway is the portion of the floodplain adjacent to the channel which is required to carry base year floodwater.



Blue River Floodplain

No new risks to the environment or floodplain are expected in the Study Area. If pier replacements or embankments alter the width or depth of the floodplain, hydrology modeling would be required to show that the base flood elevation would not be change either upstream or downstream of the crossing by more than one foot.



Legend: Grey - floodway, blue - 100 year flood, light blue - 500 year flood

Blue River Floodplain

Does the Study Area Encroach on the Little Blue River Floodway?

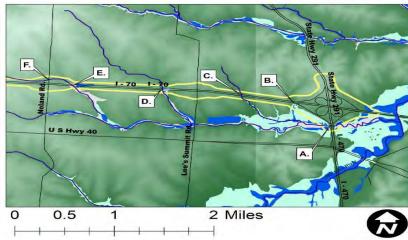
The Study Area crosses the 100-year flood limits and regulated floodway of the Little Blue River and an unnamed tributary that parallels I-70 on the south limits of the Study Area. The Study Area crosses the regulated floodway of the unnamed tributary in six places:

- A. Crossing located on the south side of the I-470 interchange. The crossing runs beneath I-470. The unnamed tributary to Little Blue River crosses I-470 through a double 8-foot by 8-foot concrete box culvert.
- B. Crossing located on the west side of the 1-470 interchange. The crossing runs beneath I-70. The unnamed tributary to Little Blue River crosses I-70 through a 5-foot by 5-foot concrete box culvert.
- C. Crossing located on the east side of the Lee's Summit Road interchange. The crossing runs beneath I-70. The



Little Blue River Floodplain

- unnamed tributary to Little Blue River crosses I-70 through a 6-foot by 6-foot concrete box culvert.
- D. Crossing located on the west side of the Lee's Summit Road interchange. The crossing runs beneath I-70. The unnamed tributary to Little Blue River crosses I-70 through an 8-foot by 10-foot concrete box culvert.
- E. Crossing located on the east side of the interchange at Noland Road, beneath I-70. The unnamed tributary to Little Blue River crosses I-70 through a 6-foot by 7-foot concrete box culvert.
- F. Crossing located on the north side of the Noland Road interchange. The crossing runs beneath Noland Road. The unnamed tributary to Little Blue River crosses Noland Road through a 4-foot by 4-foot concrete box culvert.



Legend: Grey - floodway, blue - 100 year flood, light blue - 500 year flood

Little Blue River Floodplain

No new risks to the environment or floodplain are expected in the Study Area. Potential floodway alterations should be avoided if reasonably possible. If floodway alterations are required, box culverts should be replaced with the same type and size as the existing. Hydraulic modeling of floodway alterations may be required to show that the base flood elevation would not change either upstream or downstream of the crossing by more than one foot.

How will the Strategies Affect Floodplains?

The potential for floodplain encroachment exists for all strategies except the No-Build Strategy as shown in **Table 3.13.1**. Floodplains could be affected by earth movement and the impact of heavy equipment during construction. The effects on the floodway can be avoided by appropriate design and verified through hydraulic modeling.

3.13.1 Acres of Floodplain within the Sub-Area Construction Limits

	No- Build	Improve Key Bottlenecks	Add General Lanes	Transportation Improvement Corridor	Identified Preferred Strategy*
Downtown Sub-Area	0	0	0	0	0
Urban Sub-Area	0	0	0	0	0
I-435 Sub-Area	0	16	17	20	16
Suburban Sub-Area	0	3	3	3	3
I-470 Sub-Area	0	0	1	1	1
TOTAL	0	19	21	24	20

Source: FEMA Floodplain GIS data

No-Build Strategy

The No-Build Strategy will not affect any additional floodplain.

Improve Key Bottlenecks Strategy

The Improve Key Bottlenecks Strategy will affect 19 acres of floodplain, which is the fewest acres of floodplains impacted by any of the Build Strategies. The two areas impacted are the I-435 Sub-Area and the Suburban Sub-Area. The majority of the potential impacts are related to crossing the Blue River.

Add General Lanes Strategy

The Add General Lanes Strategy will affect 21 acres of floodplain. This strategy impacts the I-435, Suburban, and I-470 Sub-Areas. The majority of the potential impacts are related to crossing the Blue River.

^{*} Uses the widest potential footprint between east of I-435 and I-470

Transportation Improvement Corridor Strategy

The Transportation Improvement Corridor Strategy will affect 24 acres of floodplain, which is the most acres anticipated to be impacted by any of the Build Strategies. This strategy impacts the I-435, Suburban, and I-470 Sub-Areas. The majority of the potential impacts are related to crossing the Blue River.

Identified Preferred Strategy

The Identified Preferred Strategy will affect a total of 20 acres of floodplain. The Sub-Area impacted the most by this strategy is the I-435 Sub-Area with some additional impacts in the suburban Sub-Area and the I-470 Sub-Area. The majority of the potential impacts are related to crossing the Blue River.

The floodplain effects are expected to be moderate for all strategies. This means that construction may cause unavoidable permanent water quality degradation that results in permanent aesthetic loss but does not result in either permanent or temporary loss of one or more beneficial uses of the floodplain.

For all strategies, except the No-Build Strategy, potential exists for encroachment to cause permanent destruction of habitat on stream edges by movement of soil and heavy equipment, concrete bridge abutments, and channelization. Also, for all strategies, potential exists for some temporary loss of water quality in the Blue River due to sediment, debris, and dust. Destruction of stream habitat may result in worsening water quality due to the loss of the beneficial affects of marginal and bottom dwelling plants and animals.

During construction, boating, fishing, and full body contact within the construction zone will be prohibited due to safety concerns. However, no temporary or permanent loss of any beneficial use due to water quality degradation is anticipated.

The Improve Key Bottlenecks Strategy and the Identified Preferred Strategy affect the fewest acres in the Blue River. However, the difference between the fewest and most acres impacted in the Blue River floodplain is four acres. This difference may not result in a measureable difference in the water quality between the Build Strategies especially if appropriate measures to minimize impacts are taken during construction.

What are the Streams in the Study Area?

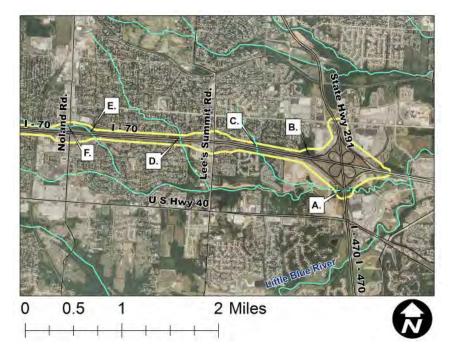
A total of approximately ten streams appear to be crossed by the existing I-70 and connecting roads within the Study Area boundary. The following paragraphs describe the streams crossed in the Study Area:

Stream A: Unnamed tributary to Little Blue River

Stream A is a medium-sized perennial stream. The stream flows from a newly constructed reservoir along a gently-sloped paved spillway, crosses under I-470, and re-enters its natural channel situated within the Little Blue River floodplain east of I-470. The channel is approximately 12 to 15 feet wide, and two to three feet deep with numerous bends downstream of the I-470 crossing. This stream was highly disturbed by recent construction activities on both sides of I-470. The quality of this stream is likely very low due to high levels of disturbance and physical modifications.

What is a Spillway?

A spillway is a paved, sloped pathway for water that allows for a controlled flow of water from a dam or storage location to a downstream area.



Little Blue River and Tributary Crossings

<u>Stream B: Unnamed tributary to afore-mentioned unnamed tributary to Little Blue River</u>

Stream B is a small- to medium-sized stream. North of I-70, the stream has significant amounts of debris within the streambed. The channel is approximately eight to ten feet wide and one to two feet deep. At the time of the evaluation, the water flow within the stream was relatively fast. This stream has relatively steep slopes on the sides of and within the streambed. The quality of this stream is likely low due to high levels of debris within the northern portions. There are some physical characteristics such as the presence of pools and riffles may increase ecological quality.

<u>Stream C: Unnamed tributary to afore-mentioned unnamed tributary to Little Blue River</u>

Stream C is a small-sized stream. North of I-70, the streambed and channel has significant amounts of debris. The stream channel ranges from approximately one to six feet wide and from one to six inches deep. The stream has steep slopes on the sides of and within the streambed. The quality of this stream is likely very low due to high levels of debris within the upper watershed.

<u>Stream D: Unnamed tributary to afore-mentioned unnamed tributary to Little Blue River</u>

Stream D is a small- to medium-sized stream. North of I-70, the stream has significant amounts of debris within the streambed. The stream is approximately four to six feet wide and two to eight inches deep. At the time of evaluation, water was flowing in the stream. The stream has steep slopes on the sides of and within the streambed. The quality of this stream is likely low due to high levels of debris within the northern portions

<u>Stream E: Unnamed tributary to afore-mentioned unnamed tributary to Little Blue River</u>

Stream E is a small-sized stream. North of I-70, the streambed and channel has significant amounts of debris. The stream

ranges from approximately four to eight feet wide and from one to six inches in depth. At the time of evaluation, water flow was barely evident. The quality of this stream is likely low due to high levels of debris within the northern portions.

<u>Stream F: Unnamed tributary to the unnamed tributary associated</u> <u>with Stream E</u>

Stream F is a drainage way that has been radically modified.

Stream G: Unnamed tributary to Round Grove Creek

Stream G is a small-sized stream. North of I-70, the streambed and channel have significant amounts of debris. The stream ranges from approximately four to six feet wide and from one to twelve inches in depth. Water flow was minimally evident at the time of evaluation. The stream has steep slopes on the sides of and within the streambed. The quality of this stream is likely low due to high levels of debris.



Blue River and Tributary Crossings

Stream H: Unnamed tributary to Round Grove Creek

Stream H is a very small-sized stream that may not satisfy the criteria for jurisdictional waters of the U.S. The streambed and channel are a little more than a ditch approximately two feet wide and two feet deep north of I-70.

Stream I: Big Blue River Bridge

Stream I is the Big Blue River discussed in more detail in the prior floodplain discussion.

Stream J: Drainage of Cloverleaf on I-70

An unnamed tributary to the Big Blue River acts as a drainage way inside the cloverleaf from westbound I-70 to southbound I-435. This is a small-sized intermittent stream that traverses the I-70 interchange through a series of underground culverts.

Are any of these Streams Protected?

Streams are often protected because they are defined as Waters of the United States. The term, Waters of the United States, applies to the jurisdictional authority of the U.S. Army Corps of Engineers under the Clean Water Act. All streams that meet the definition are subject to the protection of the Corps of Engineers and permits will be required to modify these streams. All of the stream crossings discussed above were determined to be Waters of the United States except Streams F and J.

How will the Strategies Affect Stream and Tributary Crossings?

The main difference between the Build Strategies is in the I-470 Sub-Area where two fewer streams are affected in the Improve Key Bottlenecks Strategy. **Table 3.13.2** shows the number of new or modified stream and tributary crossings for each of the strategies.

<u>Downtown Sub-Area</u>: There are no stream or tributary crossings in this Sub-Area of the Study Area.

<u>Urban Sub-Area</u>: There are no stream or tributary crossings in this Sub-Area of the Study Area.

Table 3.13.2 New or Modified Stream and Tributary Crossings by Sub-Area

	No- Build	Improve Key Bottlenecks	Add General Lanes	Transportation Improvement Corridor	Initial Preferred Strategy*
Downtown Sub-Area	0	0	0	0	0
Urban Sub-Area	0	0	0	0	0
I-435 Sub-Area	0	1	1	1	1
Suburban Sub-Area	0	5	5	5	5
I-470 Sub-Area	0	2	4	4	4

Source: GIS database verified by field study.

<u>I-435 Sub-Area</u>: The I-70 Bridge over the Blue River, in the I-435 Sub-Area, is proposed for reconstruction in all of the Build Strategies. Potential for encroachment on the floodplain of the Blue River, as measured by the area of the floodplain within the construction limits of the strategies, is shown in **Table 3.13.1**.

<u>Suburban Sub-Area</u>: All five tributaries in the Suburban Sub-Area cross under I-70 in culverts. However, stormwater drainage systems that feed into these tributaries are potentially in the construction areas. Demolition and reconstruction of the highway is anticipated in the Suburban Sub-Area for all Build Strategies.

The potential for drainage water quality degradation in the Suburban Sub-Area during construction appears to be equal among all strategies except the No-Build Strategy.

<u>I-470 Sub-Area:</u> The Improve Key Bottlenecks, the Add General Lanes, the Transportation Improvement Corridor, and the Identified Preferred Strategies include the I-70 crossing of the Little Blue River and an I-470 crossing of an unnamed tributary to the Little Blue River within construction limits.

The Add General Lanes, Transportation Improvement Corridor, and potentially the Identified Preferred Strategies will include the construction of flyover lanes at the I-70/I-435 interchange and reconstructing I-470 bridges over the Little Blue River. Also, the construction limits of these projects will

^{*} Uses the widest potential footprint between east of I-435 and I-470

potentially affect on an unnamed tributary to the Little Blue River at a crossing of I-470.

What are Federal Emergency Management Agency (FEMA) Buyout Lands?

The Flood Disaster Protection Act of 1973, as amended by the Disaster Relief and Emergency Assistance Act of 1988 (The Stafford Act), identified the use of disaster relief funds under Section 404 for the Hazard Mitigation Grant Program (HMGP), including the acquisition and relocation of flood damaged property. The Volkmer Bill further expanded the use of HMGP funds under Section 404 to "buyout" flood damaged property, which had been affected by the Great Flood of 1993.

There are numerous restrictions on these FEMA buyout properties. No structures or improvements may be erected on these properties unless they are open on all sides. The site shall be used only for open space purposes, and shall stay in public ownership. These conditions and restrictions (among others), along with the right to enforce same, are deemed to be covenants running with the land in perpetuity and are binding on subsequent successors, grantees, or assigns. Any decision involving these properties should take into consideration that two to three years is necessary to process an exemption from FEMA to utilize this parcel. This exemption would likely be a permanent easement rather than a transfer of property.

There are no known FEMA buyout properties in the Study Area.

How will Floodplains, Streams, and River Crossings be Analyzed in the Second Tier Studies?

The Second Tier studies and additional design efforts will likely narrow the impact area and work to avoid, minimize, and mitigate impacts to the floodplains, rivers, and streams in the Study Area. Careful maintenance of best management practices for the control of sediment and runoff can reduce and mitigate the potential for temporary degradation of the water quality in the Blue River and the Little Blue River.

3.14 Wetlands

The section discusses the potential effects of I-70 improvements on wetlands. Information for this section was collected by telephone, searches of online databases, National Wetlands Inventory (NWI) mapping, and limited field investigations.

Why are Wetlands Important?

Long regarded as wastelands, wetlands are now recognized as important features in the landscape that provide numerous beneficial services for people and for fish and wildlife. Some of these services, or functions, include protecting and improving water quality, providing fish and wildlife habitats, storing floodwaters, and maintaining surface water flow during dry periods. In addition, wetlands provide recreational opportunities, aesthetic benefits, sites for research and education, and commercial fishery benefits. These beneficial services are the result of the inherent and unique natural characteristics of wetlands.

What Wetlands are located in the Study Area?

The U.S. Fish and Wildlife Service (USFWS) NWI maps indicate that a total of five small areas within the boundaries of the Study Area are classified as wetlands. The U.S. Army Corps of Engineers (USACE) is the primary regulatory agency with jurisdiction over wetlands. Thus, areas identified as NWI wetlands are therefore considered potential wetlands. **Table 3.14.1** identifies each of the wetlands potentially meeting USACE criteria. These wetlands are described in the paragraphs and shown on exhibits that follow the table.

What is a wetland?

Wetlands are areas where water covers the soil, or is present either at or near the surface of the soil all year or for varying periods of time during the year.



Little Blue River

What is the National Wetlands Inventory?

The National Wetlands Inventory is an inventory the nation's wetlands.

Table 3.14.1 Identified Wetlands

Identification	Jurisdictional or	Area	Potential Acres
Number	Non-jurisdictional	(Acres)	of Impact
1	Jurisdictional	5.1	2.8
2	Jurisdictional	13.4	9.4
3	Non-jurisdictional	0.3	0.3
4	Non-jurisdictional	0.9	0.9
5	Non-jurisdictional	0.9	0.9

What is a Jurisdictional Wetlands?

U.S. Army Corps of Engineers definition used for jurisdictional wetlands requires that all three attributes: hydrophytes, hydric soils, and hydrology must be present.

What is hydrophytic vegetation?

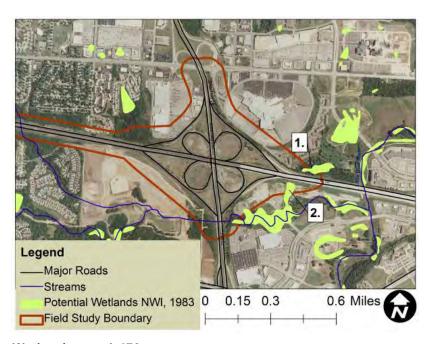
Hydrophytic vegetation, or hydrophytes, includes the vegetation that has adapted to life in water or in waterlogged soils.

What are hydric soils?

Hydric soils are saturated long enough during the growing season to deprive the root system of oxygen, likely indicating a wetland.

1 - Northeast quadrant of the I-70/I-470 interchange

This potential wetland is associated with the forest situated along an unnamed tributary to the Little Blue River that originates south of the Independence Center shopping center. This 2.8 acre area is a forested wetland that is temporarily flooded. With the exception of the presence of hydrophytic vegetation communities, no other indicators of jurisdictional wetlands were observed at this location. The U.S. Department of Agriculture (USDA) on-line soil mapping indicates that the soils at this location are classified as partially hydric due to occasional flooding (USDA 2008).



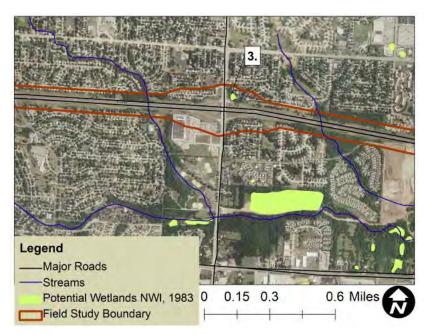
Wetlands near I-470

2 - Southeast quadrant of the I-70/I-470 interchange.

This potential wetland is associated with the forest situated along an unnamed tributary to the Little Blue River that originates in the urbanized neighborhoods to the west. This 13.4 acre area is a forested wetland that is temporarily flooded. With the exception of the presence of hydrophytic vegetation communities, no other indicators of jurisdictional wetlands were observed at this location. The portion of the wetland in the Study Area has been heavily disturbed by recent earthmoving activities. The USDA on-line soil mapping indicates that the soils at this location are classified as partially hydric due to occasional flooding (USDA 2008).

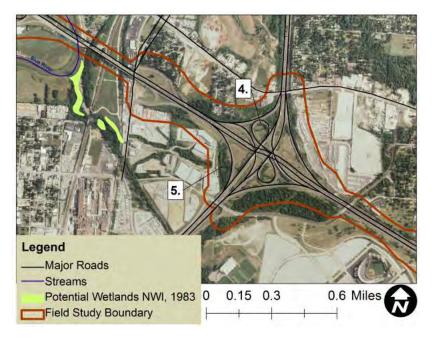
<u>3 - Northeast quadrant of the I-70/Lee's Summit Road interchange.</u>

This potential wetland is associated with a small pond located on private property. This 0.30 acre area is a man made pond probably constructed as a retention basin. Due to its location on private property, this potential wetland was not observed. The USDA on-line soil mapping indicates that this location is classified as non-hydric (USDA 2008).



Wetlands near Noland Road

This potential wetland is associated with a drainage way that flows through the inner cloverleaf area from east to west. A small stand of cattail has become established along the south bank and standing water as present. This 0.9 acre area is a result of construction activities. The USDA on-line soil mapping indicates that this location is classified as non-hydric (USDA 2008).



Wetlands near I-435

<u>5 - Southwest of the exit ramp from eastbound I-70 to southbound I-435.</u>

This potential wetland is associated with the heavily forested area between the exit ramp and the built-up industrial area to the southwest. This 0.9 acre area is a forested wetland that is temporarily flooded. Due to its location in a heavily wooded and rugged terrain, this potential wetland was not observed. The USDA on-line soil mapping indicates that the soils at this location are classified as non-hydric (USDA 2008).

How will the Strategies Affect Wetlands and Habitat?

The potential for wetland and habitat loss was measured by estimating the area of wetlands within the boundaries of the construction limits. Although the Improve Key Bottlenecks Strategy potentially may disturb the least amount of wetlands, the difference is little more than half an acre across the entire Study Area. The I-470 Sub-Area is the primarily location where wetland disturbances occur between the Build Strategies. **Table 3.14.2** shows the breakout of potential wetland area disturbance by strategy and location.

Table 3.14.2 Acres of Wetlands Area within the Sub-Area Construction Limits

		Improve Kev	Add General	Transportation Improvement	Identified Preferred
	No-Build	Bottlenecks	Lanes	Corridor	Strategy*
Downtown Sub-Area	0	0	0	0	0
Urban Sub-Area	0	0	0	0	0
I-435 Sub-Area	0	0.90	0.90	0.90	0.90
Suburban Sub-Area	0	0.02	0.13	0.13	0.13
I-470 Sub-Area	0	0.46	1.00	0.96	1.00
Total	0	1.38	2.03	1.99	2.03

Source: National Wetlands Inventory GIS data modified based on Field Investigations * Uses the widest potential footprint between east of I-435 and I-470

The pond listed in the Suburban Sub-Area is a man-made water feature on private property which was identified as wetland 3. The total area of this pond is 0.30 acres about a third of which may be affected by construction of the Add Lane Capacity Strategy, the Transportation Improvement Corridor Strategy, or the Identified Preferred Strategy.

How will the Identified Preferred Strategy Affect the Wetlands and Habitat?

Since the all of the wetlands and habitats are located at or east of the I-435 Interchange, the Identified Preferred Strategy impacts will mirror the impacts of the wider footprint of the Add General Lanes Strategy. The Identified Preferred Strategy is anticipated to impact 2.03 acres of wetlands.

What are the Next Steps?

The Second Tier studies and additional design efforts will likely narrow the impact area and work to avoid, minimize, and mitigate impacts to wetlands and habitats in the Study Area. During the Second Tier studies, wetland delineation and habitat preservation efforts will occur.

3.15 Wildlife, Plants, and Threatened and Endangered Species

This section discusses the effects the strategies may have on wildlife, plants, and protected species.

The Endangered Species Act (ESA) of 1973 assigned the Department of the Interior, U.S. Fish & Wildlife Service (USFWS) to establish a list of federally protected species. The ESA states that each federal agency must insure that "any action authorized, funded, or carried out" by that agency "is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification" of officially designated critical habitat of these species. The Study Area is highly urbanized with only scattered areas of undeveloped land. These mostly consist of open lots, small forests, and land adjacent to stream and river crossings.

Who Supplied the Information in this Section?

The Missouri Department of Conservation (MDC) is responsible for the determination of the state-level protection status of wildlife and plants in Missouri. The MDC maintains a Natural Heritage Database for occurrences of natural heritage resources, including habitats of rare, threatened, or endangered plant and animal species, and unique or exemplary natural communities.

According to various on-line databases including the MDC Natural Heritage Database and the USFWS Threatened and Endangered Species System (TESS), a variety of threatened and endangered species are listed for Jackson County in Missouri.

The Study Team wildlife biologist verified habitat for identified threatened and endangered species by first-hand observation in the field. The wildlife biologist also verified, as part of the habitat field investigations, locations of forest, wetlands, streams and other important habitat features.



Bald Eagle



Barn Owl



Peregrine Falcon



Pallid Sturgeon

What Species Are Likely Found in the Study Area?

Searches by the Study Team indicate that three protected wildlife species are known to occur in Jackson County and have a State designated endangered status:

- The bald eagle (Haliaeetus leucocephalus),
- The barn owl (Tyto alba)
- The peregrine falcon (Falco peregrinus).

Terrestrial habitat for any of the above three birds does not appear to be present within the Study Area boundaries. Peregrine falcons have managed to survive in urbanized environments by nesting on top of tall buildings. In 2002, a peregrine falcon nesting on the Commerce Bank Towers in downtown fledged four young. However, tall urban buildings are a creation of humans and do not constitute a terrestrial habitat simply because a species is adaptable enough to use it.

The USFWS TESS database indicates that one wildlife species is known to occur in Jackson County and have a Federal designated threatened or endangered status:

• The pallid sturgeon (Scaphirhynchus albus).

Aquatic habitat for the pallid sturgeon is definitely not present within the Study Area boundary. The bald eagle is no longer federally listed as threatened or endangered. The bald eagle is still protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. Terrestrial habitat for the bald eagle does not appear to be present within the Study Area boundaries.

Due to the absence of habitat for listed threatened and endangered species within the Study Area, effects on these species from the proposed strategies are unlikely.

A wide variety of other animal species have adapted to the fragmented forested areas and habitats. Deer, turkeys, rabbits, skunks, raccoons, opossums, squirrels, a variety of birds, other small mammals, reptiles, and amphibians likely frequent the forested and open areas in the Study Area. These species have adapted to the human disturbance and seem to thrive in these

areas. During construction, these animals will move into areas away from the disturbance. However, they will quickly repopulate suitable areas once construction has ceased and vegetation re-growth has occurred.

Clearing and grading during construction will likely affect the habitat areas for some of these species. Nearby areas of similar habitat are expected to support the wildlife potentially relocated by the project. Clearing of trees and other vegetation would be confined to construction limits to preserve as much existing natural growth as possible.

Forested Areas

Treed and forested areas are important as they are among the most likely locations for wildlife and non-cultivated plants.

Trees were found growing within the I-70 existing right of way from the Missouri-Kansas state line to the Little Blue River. However, most of these groups of trees were cultivated plantings, deliberately placed as an aesthetic wind-break. The Study Team defined forested areas in the Study Area as large continuous groups of trees and undergrowth which appeared to have "voluntarily" sprouted where they were found. These areas were identified from 2006 digital aerial photography and verified by comparing the 2007 digital aerial photography and field investigations. **Table 3.15.1** was prepared by measuring the forested areas within the anticipated boundaries of the construction for each of the strategies.

Table 3.15.1 Acres of Potential Forested Area Loss

	No- Build	Improve Key Bottlenecks	Add General Lanes	Transportation Improvement Corridor	Identified Preferred Strategy*
Downtown Sub-Area	0	0	0	0	0
Urban Sub-Area	0	0	0	0	0
I-435 Sub-Area	0	36	40	42	40
Suburban Sub-Area	0	13	10	12	10
I-470 Sub-Area	0	8	19	15	19
TOTAL	0	57	69	69	69

Source: GIS database, Aerial Photography 2006 and Aerial photography 2007, verified by Field Investigation. *Uses the widest potential footprint between east of I-435 and I-470

The I-435 and the I-470 Sub-Areas of the Improve Key Bottlenecks Strategy will potentially lose significantly less forested area compared to the other Build Strategies. However, in the Suburban Sub-Area of the Improve Key Bottlenecks Strategy, the potential loss of forested area is greater than the potential loss of forested area in the other Build Strategies. Overall, the Improve Key Bottlenecks Strategy minimizes potential loss of forested areas compared with the other strategies.

What are the Next Steps?

During the Second Tier studies more detailed identification of potential species sites will be completed. This will include surveys for habitat in all identified locations where threatened or endangered species may exist. As no such locations have been identified, minimal survey work may be needed. The Second Tier studies will identify potential measures to avoid, minimize, and mitigate effects of I-70 improvements on natural areas, plants, and wildlife regardless of their status.

3.16 Farmland and Soils

The entire Study Area is located in the urbanized cities of Kansas City and Independence, Missouri. Over time, development has transformed any farmland in this area to urban uses including homes and businesses. As a result, there are no farmlands located within the Study Area of the I-70 First Tier EIS.

How Will the Strategies Affect Farmland and Soils?

There are no farmlands or prime agricultural soils remaining undeveloped within the Study Area, as a result none of the strategies will impact farmland or prime soils. A farmland conversion impact rating form is not needed for this project.

3.17 Energy

This section discusses the effect the proposed strategies will have on the consumption of energy. The principal energy consuming activity of highway transportation is vehicle operation.

How Will the Strategies Affect Energy Consumption?

All strategies, other than the No-Build Strategy, will improve traffic flow and reduce vehicle fuel consumption on a per vehicle basis. However, the improved traffic flow is forecast to cause additional trips and vehicle miles traveled. The additional trips and vehicle miles traveled for the Build Strategies is a direct effect of increasing the travel efficiency through the Study Area and attracting rerouted trips from elsewhere in the local transportation network.

Overall, the higher amount of trips and vehicle miles traveled resulting from any of the Build Strategies may have a slightly larger impact on energy use when compared to the No-Build Strategy. On the other hand, an increase in travel efficiency through the Study Area, as well as advancing vehicle technology (electric and hybrid vehicles) will likely improve the average miles-per-gallon fuel economy for the overall vehicle fleet leading to reduced energy consumption over time. The anticipated improvements to vehicle fuel efficiencies will also reduce the energy usage throughout the Study Area for all of the strategies.

All strategies, except the No-Build, include provisions such as bus on shoulder and potential enhanced express bus service that may increase use of transit and reduce the energy used per traveler in the corridor.

No-Build Strategy

The No-Build Strategy will not improve traffic flow and reduce vehicle fuel consumption. In fact, an increase in congestion will lead to more vehicle fuel consumption as vehicles are in stop and go traffic for a longer period of time. In addition, the No-Build Strategy would likely require more frequent maintenance which often requires temporary lane

closures resulting in traffic congestion and increased energy use due to stop and go traffic.

Improve Key Bottlenecks Strategy

The Improve Key Bottlenecks Strategy will reduce the consumption of energy for individual vehicles on I-70. The Improve Key Bottlenecks Strategy will improve traffic flow and reduce vehicle fuel consumption through the corridor. During construction, lane restrictions or closures may be required which would lead to increased congestion and energy use.

Add General Lanes Strategy

The Add General Lanes Strategy will reduce the consumption of energy for individual vehicles on I-70. The Add General Lanes Strategy will improve traffic flow and reduce vehicle fuel consumption through the corridor. During construction, lane restrictions or closures may be required which would lead to increased congestion and energy use.

Transportation Improvement Corridor Strategy

The Transportation Improvement Corridor Strategy will reduce the consumption of energy for individual vehicles on I-70. The Transportation Improvement Corridor Strategy will improve traffic flow and reduce vehicle fuel consumption through the corridor. During construction, lane restrictions or closures may be required which would lead to increased congestion and energy use.

<u>Identified Preferred Strategy</u>

The Identified Preferred Strategy will reduce the consumption of energy over time. The Identified Preferred Strategy will improve traffic flow and reduce vehicle fuel consumption through the corridor. During construction, lane restrictions or closures may be required which would lead to increased congestion and energy use.

I-70 First Tier Draft EIS Energy

How Will Energy Use Be Further Evaluated During Second Tier Studies?

The Second Tier studies will further investigate potential changes in energy uses due to improvements on I-70. This may include further analysis of how specific improvements and design considerations may reduce energy use in the corridor.

3.18 Utilities

The Study Area contains the following major utility services for Kansas City and Independence: sanitary sewer, water, gas, electric, and communications. The Study Team used basic web site searches in identifying the key utilities in the corridor.

Electrical Distribution

The Kansas City Power and Light Company provides the electric service in Kansas City. The Study Area contains a 161 Kilovolt (kV) electrical power line that runs southeast parallel to I-70 from approximately the Kansas City-Independence border to Sterling Avenue. Independence's electrical service is provided by the Independence Power and Light Company. According to the Independence Comprehensive Plan (1993), the City plans on extending this 161 kV line southeast to US-40 and along US-40 to Lee's Summit Road.



Overhead electric power lines across I-70

Gas Distribution

Kansas City gas service is provided by the Missouri Gas Energy Company. Independence's gas service is provided by the Missouri Gas Energy or the Kansas Gas Service Company (formally "Gas Service Company"). The Study Area is well served with gas lines to the nearby residential, retail, and industrial areas.

Water Distribution

Several water lines run parallel to or cross the I-70 Study Area. Within Kansas City, the municipal Water Services Department provides water. Within Kansas City, water lines 4 to 30 inches in diameter and sewer lines less than 10 to 52 inches in diameter frequently parallel the I-70 corridor.

Within Independence, the municipal Water Department provides water. Within Independence, water lines up to 36 inches in diameter run in a north-south direction along Noland Road and MO-291. The Study Area is well served with water distribution lines serving local residences and businesses.

Sanitary Sewer Distribution

Several sanitary sewer lines run parallel to or cross the I-70 Study Area. Within Kansas City, the Water Services Department provides the sanitary sewer system.

The Kansas City Water Pollution Control Department controls the sanitary sewer system. The Little Blue Valley Sewer District owns an interceptor line that intersects the Study Area close to the I-435/I-70 interchange. The interceptor line, ranging from 114 to 126 inches in diameter, also runs in a north-south direction and collects sewage from adjoining sewer lines throughout central Independence. The Study Area is well served with sanitary sewer lines serving local residences and businesses.



Television Tower located near the study area

Communications

Kansas City has telephone service through AT&T and cable service is provided by Comcast, Time Warner, or Everest dependent on the location in the city. Independence telephone service is provided by AT&T. Independence cable service is either provided by Comcast or Time Warner, dependent on the location in the city. The Study Area is well served with communication lines to the nearby residential, retail, and industrial areas.

How Will the Strategies Affect the Utilities?

No-Build Strategy

The No-Build Strategy would not result in utility impacts for the community, neighborhoods, or natural resources.

<u>Identified Preferred and Build Strategies</u>

Temporary impacts in service may occur to any of the described utility services, however, temporary telephone and cable service impacts are most probable. Public and private owners subject to utility easements for either above or below ground utilities on their property could be restricted from certain uses on that portion of their property. Prior written

I-70 First Tier Draft EIS 3.18-2 Utilities consent from an easement grantee would be required in order to place temporary or permanent buildings, structures, other improvements, or terrain alterations. The easement grantee would also retain the right of access to that portion of property. It is not expected that any property owners would be denied reasonable economic use of their property as a result of utility easements.

How Will Utilities be addressed in the Second Tier Studies?

The Second Tier studies will further evaluate and refine the utility impacts. Additional engineering design for the Identified Preferred Strategy will be completed in the Second Tier studies which will allow for greater analysis of effects on specific utility lines or corridors. Second Tier studies will preliminarily identify any needs for relocating utilities along the corridor.

3.19 Indirect and Cumulative Impacts

This section analyzed indirect and cumulative impacts of the proposed project. The analysis looked at other major reasonably foreseeable roadway projects within Jackson County, Missouri. The greatest potential for indirect or cumulative impacts from the project includes commercial relocations and traffic flow impacts.

What are Indirect Impacts?

Indirect (secondary) impacts are caused by the project that become evident later in time or are farther removed in distance than direct impacts, but are still "reasonably foreseeable." An example of an indirect impact would be land use changes that occur along a newly constructed highway, such as the development of motels. While the new highway did not directly cause the construction of motels, it encouraged their construction by providing improved access to the properties. The construction of the motels may in turn cause the filling of wetlands, which would also be an indirect impact. Any such foreseeable indirect impacts to land use were identified with the help of local, state, and federal agencies regarding land use issues.

The development in the drainage basins adjacent to the Study Area has altered the hydrology from its original mostly permeable forest and prairie to mostly impermeable urban and suburban surfaces. This has affected water quality. Water flows more quickly on paved surfaces increasing erosion and sediment movement.

What are Cumulative Impacts?

Cumulative impacts are those impacts that result when adding the incremental impacts of a project to other past, present, and foreseeable future projects. The incremental impacts of a project may be minor. However, when these impacts are added to impacts from other projects over time, the overall impact could be considerable. Cumulative impacts can be positive or negative for many potential resources being evaluated.

What are Direct Impacts?

Direct impacts are caused by the construction of the project. Direct impacts are covered mostly in **Chapter 3** and are a simple cause and effect.

Example: A wetland is filled to accommodate construction of a roadway.



Projects considered in cumulative analysis would consist of past, present, and future transportation and land development projects. The time frame to be used for considering past, present, and future projects is from 1985 to 2035 and the area of analysis includes the cities of Kansas City and Independence, Missouri as well as consideration of other projects along I-70 in Missouri and other interstates in the Kansas City Metropolitan area. Mid-America Regional Council's current Long Range Transportation Plan was also reviewed for any major projects that may add to cumulative impacts.

What Other Projects were Considered for Cumulative Impacts?

The original construction of I-70 in Kansas City was completed over 45 years ago. At that time, approximately 2,000 parcels were impacted. The primary impacts were to residential parcels, however, some businesses and agricultural lands were also impacted. The interstate split neighborhoods and disconnected streets that once provided community access. The interstate also provided limited interchange access which promoted growth of service type industries around these new junctions. Although this did not occur within the timeframe for the cumulative impacts analysis for this project, it is still important to consider the long-term effects of I-70 construction from the time it was first constructed.

The Study Team considered the following other projects in detail while assessing potential cumulative impacts.

I-29/35 EIS

I-29/35 corridor leading into downtown Kansas City is already heavily used and forecasts show traffic volumes will continue to rise. The project will upgrade Interstate 29/35 to six lanes from just north of the Route 210/Armour Road interchange to Independence Avenue. An additional southbound lane will be built from the northeast corner of the downtown loop to Oak Street.

U.S. 71

U.S. 71 (Bruce R. Watkins Drive) is a freeway constructed from I-435 to I-70 at the southeast corner of the downtown loop. Bruce R. Watkins Drive is primarily six lanes with a transition to four lanes near the south end of the freeway.

I-70 and I-435 Interchange

As part of an existing project in the STIP, MoDOT has committed to modifying the freeway access along I-70 and I-435 to relieve congestion in the I-435 and I-70 interchange. The improvements include:

- Adding lanes to I-70.
- Modifying ramps on I-70 eastbound into a collector distributor system and extending ramps at several locations for additional weave, merge, and diverge area.
- Adding partial access at I-435 and U.S. 40 and modifying access at I-70 and Manchester Trafficway.
- Modifying the ramp terminals at U.S. 40/31st Street
- Replacing the Blue Ridge Cutoff Bridge.

These improvements reduce congestion, improve safety and address two bridge maintenance needs in the interchange area.

The ultimate interchange configuration will build off of the initial work in the STIP. MoDOT will continue to modify the freeway access along I-70 and I-435 to relieve congestion and improve the condition of the system in the I-435 and I-70 interchange area. Similar to the programmed STIP project, the proposed improvements include:

- Adding lanes to I-435.
- Modifying ramps into a collector distributor system on I-70 and I-435 and extending ramps at several locations for additional weave, merge, and diverge area
- Reconstructing and relocating the fully directional ramps to eliminate left-side exits from the interstate.

These proposed improvements reduce congestion, improve safety and address bridge maintenance needs in the interchange area.

<u>Proposed I-70 Statewide (MARC area)</u>

MoDOT has completed a Supplemental EIS across the state incorporating truck-only lanes on I-70 between Kansas City and St. Louis. This project connects with the I-70 improvements considered in this document at the I-70/I-470 interchange. Coordination between the two projects is needed to address the transition between the truck-only lane improvements and I-70 in the Kansas City Metro area.

I-470 Purpose and Need

MoDOT is evaluating the potential needs for improvement on I-470 between Blue Ridge Boulevard and 39th Street. This study will not propose solutions; rather an analysis of root causes will be performed on the information gathered to create a Purpose and Need Statement. The Purpose and Need Statement will summarize the findings and identify deficiencies associated with the I-470 corridor. The study will prioritize short-term and long-term needs for future improvements, but will not make recommendations on what those future improvements will be. There are no alternatives developed to date for this project.

Proposed Missouri River Corridor (Lewis and Clark Expressway)

The cities of Independence, Sugar Creek, and Kansas City Missouri teamed up to study a 28 mile corridor in northeast Jackson County. The corridor is in varying phases on completion. Some elements such as Front Street, Chouteau Trafficway, and Little Blue Expressway have been completed. The Missouri River Corridor will provide a new four lane connection from I-70 to M-291 to I-435.

Proposed South Loop Link

The City of Kansas City, Missouri is currently studying the potential to develop over I-670. The proposed project would cover I-670, creating an enclosed tunnel for I-670 and expanding the development opportunities above the highway. This potential project is still in the study phase.

I-35 (I-670 to Kansas State Line)

MoDOT is currently conducting a study to evaluate the deficiencies of the existing I-35 from the Kansas State Line to I-670. This study will develop viable improvement concepts to address the needs of the corridor and make recommendations with the most feasible improvements. The recommendations will be added as an attachment to the I-70 Final FTEIS and will guide future MoDOT activity in the I-35 corridor and downtown loop.

Will FTEIS Strategies Cause Cumulative Impacts?

There are only two major projects near the Study Area between 1985 and 2035 which would have cumulative community impacts. The two projects are the future I-29/35 EIS/Northland Downtown MIS construction and the past construction of the U.S. 71 connections into the southeast corner of the downtown loop. This section will analyze the cumulative impacts on commercial relocations and traffic flow because they have the greatest potential to be affected cumulatively by the project.

The I-29/35 EIS preferred alternative identified one business to be relocated. The business property is currently vacant. The initial phase of the I-70/435 Interchange will relocate two hotels. One is currently vacant and the second has four occupied rental apartments associated with the motel. The U.S. 71 construction relocated approximately 50 commercial properties over 12 square blocks near the I-70 FTEIS Study Area.

No-Build Strategy

The No-Build Strategy would result two motels and four associated residential apartments in cumulative impacts on the community.

Improve Key Bottlenecks Strategy

The following cumulative impacts were identified for the Improve Key Bottlenecks Strategy.

<u>Commercial Relocations</u>: The I-70 FTEIS identifies up to seven commercial relocations in the Downtown Sub-Area. The cumulative impacts in the Downtown Sub-Area between 1985 and 2035 are anticipated to be approximately 57 commercial relocations from the various transportation projects.

<u>Transportation Impacts:</u> The Improve Key Bottlenecks Strategy would improve traffic flow and reduced congestion through the downtown loop and along I-70. The proposed improvements in combination with past and future projects along and connecting with I-70 would result in a positive cumulative impact to the overall travel, goods movement, and bicycle/pedestrian access across the freeway.

Add General Lanes Strategy

The following substantial cumulative impacts were identified for the Add General Lanes Strategy.

<u>Commercial Relocations:</u> The I-70 FTEIS identifies up to 14 commercial relocations in the Downtown Sub-Area. The cumulative impacts in the Downtown Sub-Area between 1985 and 2035 are anticipated to be approximately 64 commercial relocations from the various transportation projects.

<u>Transportation Impacts:</u> The Add General Lanes Strategy would improve traffic flow and reduced congestion through the downtown loop and along I-70. The proposed improvements in combination with past and future projects along and connecting with I-70 would result in a positive cumulative impact to the overall travel, goods movement, and bicycle/pedestrian access across the freeway.

<u>Transportation Improvement Corridor Strategy</u>

The following substantial cumulative impacts were identified for the Transportation Improvement Corridor Strategy.

<u>Commercial Relocations</u>: The I-70 FTEIS identifies up to eight commercial relocations in the Downtown Sub-Area. The cumulative impacts in the Downtown Sub-Area between 1985 and 2035 are anticipated to be 58 commercial relocations from the various transportation projects.

<u>Transportation Impacts:</u> The Transportation Improvement Corridor Strategy would improve traffic flow and reduced congestion through the downtown loop and along I-70. The proposed improvements in combination with past and future projects along and connecting with I-70 would result in a positive cumulative impact to the overall travel, goods movement, and bicycle/pedestrian access across the freeway.

<u>Identified Preferred Strategy</u>

The following substantial cumulative impacts were identified for the Identified Preferred Strategy.

<u>Commercial Relocations:</u> The I-70 FTEIS identifies up to seven commercial relocations in the Downtown Sub-Area. The cumulative impacts in the Downtown Sub-Area between 1985 and 2035 are anticipated to be approximately 57 commercial relocations from the various transportation projects.

Transportation Impacts: The Identified Preferred Strategy would improve traffic flow and reduced congestion through the downtown loop and along I-70. The proposed improvements in combination with past and future projects along and connecting with I-70 would result in a positive cumulative impact to the overall travel, goods movement, and bicycle/pedestrian access across the freeway.

Will FTEIS Strategies Cause Indirect Impacts?

No-Build Strategy

The No-Build Strategy would not result in any indirect impacts.

Identified Preferred and Build Strategies

Each Build Strategy may create redevelopment opportunities throughout the corridor. Improved access through improved ramps or rebuilt interchanges could lead to changes in property uses to support the traffic using the roadway. The Study Area has little undeveloped property. Thus most development that may be encouraged by improvements to I-70 will be redevelopment of existing sites as opposed to new property development on fields or other undeveloped land. There is unlikely to be substantial indirect impacts to wetlands or natural areas. During the Second Tier studies, the effects of individual improvements on neighboring businesses and development should be evaluated for potential indirect impacts.

How will the Second Tier Studies Evaluate Indirect and Cumulative Impacts?

The Second Tier studies will look at the more detailed effects of specific projects and improvements and their potential to cause indirect impacts on development. For example the impacts of changes at specific interchanges may indirectly affect development and locations near those interchanges. The Second Tier studies will also examine and consider any more localized or neighborhood level cumulative affects due to proposed I-70 improvements and other transportation or development projects.



Potential Redevelopment Opportunity

3.20 Joint Development

A joint development or multi-use concept proposes that roadway right of way be used for purposes other than the movement of traffic. Uses could include utility lines and services, parks, bicycle and pedestrian trails, parking facilities, and others. The I-70 FTEIS right of way could incorporate the multi-use concept through the accommodation of water and sanitary sewer lines, telephone conduits and poles, natural gas lines, electric cables and poles, and fiber optic lines. The Build Strategies and Identified Preferred Strategy do not include any specific joint development proposals for utilities, trails, parks, parking lots, or other uses. The individual Second Tier studies may identify the need for one or more of these joint development projects in the future.

3.21 Relationship between Short-Term Environmental Uses and the Maintenance and Enhancement of Long-Term Productivity

All of the I-70 First Tier Strategies (including the No-Build) will involve short-term and long-term tradeoffs. In the case of the I-70 FTEIS improvements, the money, labor, and construction materials used to construct the project will be substantial. Based on all of the improvements included in the strategies, the benefits should justify the initial costs. These costs and benefits are not limited to the spending of public dollars, but also include items hard to quantify such as improved travel, driver stress reduction, and economic development benefits as well as others.

How Will the Strategies Affect the Short-Term Uses versus Long-Term Productivity?

For this discussion, "short-term" refers to immediate, direct consequences of the project while "long-term" refers to its direct or indirect affects on future generations. The short-term consequences to the environment resulting from any of the strategies are discussed throughout this section.

No-Build Strategy

The No-Build Strategy will maintain the existing land uses. Over time congestion and delays will likely increase as traffic volumes grow on I-70 and other streets in the Study Area. The No-Build Strategy would not provide any long-term benefits.

Identified Preferred and Build Strategies

For the Identified Preferred and the Build Strategies, the short-term environmental uses would include:

- Temporary air, noise, and visual effects caused by the construction of improvements.
- Increased cost to motorists in time and fuel efficiency due to construction delays and detours.

- Disturbances to businesses, homes, and institutions because of construction.
- Conversion of open space and wetlands to transportation uses.
- Relocation of people and businesses, including expenses that would be incurred as compensation to these people and businesses.
- Reduction of property tax revenues resulting from the relocation of people, businesses, and other land uses.
- Cost of public funds to build roadway improvements.

Most of the long-term benefits from making improvements in the Study Area are addressed in **Chapter 1**. The long-term benefits of any of the Build Strategies include:

- Improvements in driver convenience, safety, travel time, and emergency response.
- Reduction of air pollution due to more efficient travel routes.
- Economic opportunities for local contractors in the region.

What are the Next Steps?

The next step in the environmental stage of this project is to conduct Second Tier studies. The Second Tier studies will refine the Identified Preferred Strategy and footprint to avoid or minimize impacts where possible. This may affect the short-term impacts and long-term tradeoffs.

3.22 Irreversible or Irretrievable Commitments of Resources

This section discusses the irreversible and irretrievable commitments of resources involved in the selection and construction of the No-Build and Build Strategies. Irreversible commitments of resources occur when you permanently convert something like wildlife habitat to a transportation project. You could try to convert it back later or replace it, but the habitat will never quite be the same. Irretrievable commitments of resources are the money, materials, and labor put into the project. Some of these resources, like materials, could possibly be recycled. Others would be gone forever.

How Will the Strategies Affect Irreversible and Irretrievable Resources?

No-Build Strategy

The irretrievable commitments of the No-Build Strategy include money, time, and personal hardship related to increasing congestion. As traffic delays and operational inefficiencies increase, air pollution, noise, and crashes would affect the local environment to a greater extent than exists today.

<u>Identified Preferred and Build Strategies</u>

Construction of the Identified Preferred Strategy or any of the Build Strategies involve the commitment of a range of natural, physical, and human resources, as well as public tax dollars. Land used for construction of any of the strategies is considered a permanent commitment during the time period the land is used for a highway facility. Land resources may be converted from natural, residential, and commercial areas to accommodate additional right of way needs. However, if a greater need arises for the land or if the highway facilities are no longer needed the land can conceivably be converted to another use. At present, there is no reason to believe such a conversion would ever occur.

Construction of any of the Build Strategies would utilize considerable amounts of fossil fuels, labor, and construction materials such as cement, stone, and asphalt. Such use of resources would be permanent although it would be possible to recycle these resources to a limited extent. Any construction would also require a substantial one-time expenditure of funds which are irretrievable. The commitment of these resources is based on the concept that the residents in the Study Area, the cities of Kansas City and Independence and the state of Missouri will benefit from these improvements.

3.23 Construction Impacts

This section discusses the potential effects of the strategies during construction. Actual construction activities often have additional short-term environmental effects that differ from the permanent environmental effects of the project.

What are the Construction Impacts of the No-Build Strategy?

Over time, routine maintenance of the existing roadway would periodically impact travelers passing through the Study Area. These impacts would be temporary during the period when the maintenance would occur. The No-Build Strategy would create construction noise and vibration during the maintenance activities. In addition, the No-Build Strategy would likely require more frequent maintenance which often requires temporary lane closures resulting in increased traffic congestion.



MoDOT Construction

What are the Construction Impacts of the Build Strategies?

Construction of any of the Build Strategies would result in certain short-term environmental impacts associated with construction activities. These impacts are discussed in the following sections.



MoDOT Construction

Noise

Noise from heavy construction equipment and haul trucks is a short-term but nonetheless disturbing impact upon sensitive land uses near the construction site. To minimize the adverse effects of the construction period, noise abatement measures should be considered as described in MoDOT's Engineering Policy Guide.

Air Quality

Air quality would also be subjected to short-term impacts in the construction areas. Grading operations and the transportation and handling of materials, such as earth and aggregates, would result in the release of dust into the air.



MoDOT Construction

Emissions from construction machinery would add to the motor vehicle classes of air pollution. If practical, the use of off road construction equipment that has been retrofitted with air pollution control devices would further reduce the emissions related to the project. During construction, the contractor would be responsible for adequate dust-control measures to avoid causing detriment to the safety, health, welfare, or comfort of the neighboring population or to avoid causing damage to any property, residence, or business.

Contractors involved with the construction would be required to comply with <u>MoDOT's Engineering Policy Guide</u>. Specifically, adherence to the sections concerning fugitive dust, visible emissions, and permits would be required in the construction contracts in an effort to minimize the short-term effects upon air quality within the Study Area.

If practical, the project should consider limiting the use of heavy construction equipment on days with orange or red air quality alerts.

Water Quality

Temporary deterioration of surface water quality would result from grading, bridge construction, and other construction activities. Increased cloudiness and siltation, caused by erosion of exposed land and disturbance of the stream beds, would be the greatest construction impact on water quality. Runoff from disturbed areas may also increase the levels of metals, pesticides, and nutrients in the streams, depending on the land use and rainfall at the time of construction. Groundwater quality is not expected to be affected by construction operations.

To reduce impacts on water quality, contractors would be required to minimize the amount of area cleared during a given time period and would employ erosion control measures at all stages of construction. MoDOT's Engineering Policy Guide would be required as a contract document. Control measures would include silt fences, silt basins, temporary berms, dikes, drains, gravel, mulches, and grasses as appropriate. These measures would apply to haul roads and borrow sites as well as the permanent right of way.



MoDOT Work Zone

What is Siltation?

Siltation is the build-up of a fine sediment of mud or clay that is deposited by moving water.

What is a Haul Road?

A haul road is a road used by construction vehicles.

What is a Borrow Site?

A borrow site is a staging area used during the construction process, which may be outside the project's footprint. Borrow sites can also provide fill dirt for a project.

Sanitary facilities would be required at the construction sites. Suitable storage areas and careful handling of potentially harmful materials would be required by the contractor.

Traffic Circulation

Traffic patterns and existing access points near the proposed improvements would be affected by construction activities. Construction schedules would be coordinated in advance to minimize the effects of such disruption. Suitable detours would be required to maintain traffic circulation, and areas under construction would be controlled to limit the extent of disruption to traffic flow. Contractors would be required to maintain access within a specified distance of any inhabited areas to assure continued fire protection and emergency services. Maintaining proper traffic circulation is particularly important to the surrounding businesses and freight carriers, who count on the reliability of the transportation system to conduct business and maintain profit.

Disposal of Surplus or Waste Material

Construction of the Identified Preferred Strategy or any of the Build Strategies will generate surplus and waste material including excess dirt, remnants of demolished structures, old pavement, and removed vegetation. Inert debris may be used for fill material as applicable at other locations of the project. MoDOT should consider the use of recycled materials, when particularly those materials resulting from demolition of buildings and existing pavement. Surplus and waste material will be handled and disposed of according to standard provisions contained in MoDOT's Engineering Policy Guide and Section 260.210 RSMo of the Missouri Solid Waste Management Law and Regulations. The contractor shall obtain written permission for any disposal of material on private land and no temporary or permanent disposal of material will occur in any public or private wetland, water course, or floodplain without prior approval and permit by the appropriate regulatory agencies.

In the event that unexpected buried wastes are discovered, contractors will follow MoDOT's technical bulletin "Managing Solid Waste Encountered during Excavation Activities".

What is Inert Debris?

Inert debris is solid waste, such as brick, concrete, rock, gravel, and clean soil.

How Will The Analysis of Construction Impacts Be Refined in the Second Tier Studies?

The next step in the environmental process is to conduct Second Tier studies which will further evaluate and refine the construction impacts. The Second Tier studies will refine the Identified Preferred Strategy and footprint to avoid or minimize the identified construction impacts where possible.

Public Comments and Coordination

This chapter describes how MoDOT involved and consulted with members of the public and project stakeholders regarding potential improvements along I-70 in Kansas City and Independence, Missouri. The chapter includes a discussion of the tools used to involve the public. Summaries of the public comments from all of the outreach efforts are in **Appendix E**. The chapter also explains how MoDOT followed the guidelines for public and stakeholder coordination as mandated by SAFETEA-LU.

Why is Public Involvement Important?

Public involvement for projects like the I-70 FTEIS is important for two key reasons:

- 1. MoDOT wants the public to be aware of the project and how it may affect them.
- 2. MoDOT needs public input to make the project better. Public input is used to define, evaluate, and refine alternative strategies. Public input also helps identify community grocery stores, churches, and other community resources that are important and ensures the project is responsive to the needs of the communities.

Public involvement should be timely, useful, and used in making the project better. Quality public involvement means that everyone who wants to be involved in the process has an opportunity to do so.

What was MoDOT's Plan for Involving Members of the Public?

MoDOT developed a detailed <u>Public Involvement and Agency Coordination Plan</u> specifically for the I-70 FTEIS. This plan complied with the requirements of SAFTEA-LU, the National Environmental Policy Act, and MoDOT. The plan was

Who are stakeholders?

Stakeholders are individuals and groups who are affected by or have an interest in a particular project or action. Stakeholders include property owners and residents, community groups, business groups, developers, utility companies, school districts, umbrella organizations (chambers of commerce, neighborhood associations, etc.), and elected/appointed officials at the federal, state, county, and local levels.

What is SAFETEA-LU?

Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA-LU) is the bill that governs the U.S. federal transportation spending for the years of 2004 to 2009. circulated to potential cooperating and participating agencies for review and comment. The plan was also posted on the project website for public review and comment. The plan will be updated on the website as needed during the course of the project. This plan can be found on the project website at www.modot.org/kansascity/metroi70.

The goals of the <u>Public Involvement and Agency Coordination</u> <u>Plan</u> regarding public involvement included:

- Identification of early coordination efforts.
- Establishing the timing and format for the public to have opportunities to be involved and comment on the project.
- Describing the communication methods to be implemented to inform the community and solicit feedback.
- Developing a process that achieves informed public consent regarding the project and its outcomes.

What is the Federal Register?

The Federal Register is the official daily publication for rules, proposed rules, and notices of Federal agencies and organizations, as well as executive orders and other presidential documents.

How Did MoDOT Announce the Project?

The Federal Highway Administration (FHWA) is responsible for this FTEIS and needs to officially notify the public when the project will begin. The FHWA satisfied this requirement by publishing a Notice of Intent in the Federal Register. This notice was issued on June 27, 2008 and published in the July 9, 2008 issue of the Federal Register (Vol. 73, No. 132, Pg. 39371). A copy of this Notice of Intent is located in **Appendix E**.

MoDOT announced the project to potential stakeholder agencies through a series of letters sent out in June and July 2008. MoDOT also informally announced the project to the public through a series of newsletters, postcards, and flyers distributed within the Study Area in August 2008.

How did the Study Team coordinate with Federal, State, and Local Agencies?

Agreement and input is critical in order to proceed through the study. As a result, an early effort to coordinate with federal and state agencies took place. Early coordination letters and preliminary study information were sent to these agencies in July 2008. The agencies listed below and their response letters are included in **Appendix E**.

Participating and Cooperating Agencies

There were no cooperating agencies identified for the I-70 FTEIS. The following agencies were invited to become participating agencies:

Environmental Resource Agencies:

- U.S. Army Corps of Engineers (USACE)
- U.S. Environmental Protection Agency (EPA)
- U.S. Fish and Wildlife Service (USFWS)
- Federal Emergency Management Agency (FEMA)
- Missouri Department of Natural Resources (MoDNR)
- Missouri Department of Conservation (DOC)
- Missouri Natural Resource Conservation Service (NRCS)
- Missouri State Historic Preservation Office (SHPO)
- State Emergency Management Agency (SEMA)

Local Study Management Agencies:

- City of Independence, Missouri
- City of Kansas City, Missouri
- Kansas City Area Transit Authority (KCATA)
- Mid-America Regional Council (MARC)
- Jackson County, Missouri

In addition, nine tribal governments were invited by FHWA as consulting parties to identify properties of tribal interest. Two tribal responses were received. The invitation letters and responses are included in **Appendix E**.

The resource agencies were invited to attend a scoping meeting on July 16, 2008 to describe the study, identify key environmental issues to be considered for the project, and conduct a site tour of the Study Area. A second meeting was held November 3, 2008 to discuss potential concepts,

What are cooperating and participating agencies?

The most recent major federal transportation legislation, SAFETEA-LU, included two types of agencies for specific involvement in the preparation of environmental studies.

Cooperating Agencies are federal and state agencies with a specific expertise or authority (such as needing to issue a permit) for the project.

Participating Agencies are a wider group of government stakeholders. All federal, state, regional, and local government agencies that may have an interest in the project are invited to serve as participating agencies. strategies, and ask for comments on the project's Purpose and Need document and Public Involvement and Agency Plan.

The local study management agencies were invited to the scoping meeting on June 16, 2008 to describe the study, identify key environmental issues to be considered for the project, and conduct a site tour of the Study Area. Seven additional meetings were held with the local study management agencies to share project updates, request document reviews, and receive feedback on key issues and decisions. Details of the meetings are listed in **Table 4.1**.

Table 4.1 Local Study Management Agency Meetings

Date	Location	Topic of Discussion	
July 21, 2008	MoDOT District 4 – Lee's Summit	Project Update	
September 15, 2008	MoDOT District 4 – Lee's Summit	Project Update, Strategy Packages	
		Development	
November, 3, 2008	MoDOT District 4 – Lee's Summit	Project Update, Strategy Packages	
(With Resource		Development	
Agency Meeting)			
December 8, 2008	MoDOT District 4 – Lee's Summit	Initial Strategy Package Screening, Public	
		Involvement Activities	
February 19, 2009	MoDOT District 4 – Lee's Summit	First Tier Strategy Package Screening,	
		Public Involvement Results	
May 4, 2009	MoDOT District 4 – Lee's Summit	Preferred Strategy Discussion	
June 15, 2009	MoDOT District 4 – Lee's Summit	Draft Identified Preferred Strategy	

How Could Members of the Public Learn More About the Project?

MoDOT developed several ways for members of the public to learn more about the project. These included a project website, a project phone number, project newsletters, a speaker's bureau, public meetings and listening posts, and other project interactive activities.

<u>Project Website</u>: MoDOT setup a project website to provide convenient access to project information 24 hours a day, seven days a week. The website went live on August 19, 2008 before the first round of public meetings. The website is located at www.modot.org/kansascity/metroi70.



The website was advertised through project meetings, media releases, newsletters, post cards, business cards handed out at events, and on variable message signs operated by Kansas City Scout along I-70.

<u>Project Phone Number</u>: The project used the MoDOT information line, 1-888-ASK-MoDOT, as the phone number for the public to get information about the project. Calls were forwarded to the MoDOT Project Manager. During the January 2009 public outreach effort, 15 to 20 people called to inquire about the project. In total, approximately 25 people have called the project phone line form the beginning of the project to June 2009.

<u>Speaker's Bureau</u>: MoDOT established a speaker's bureau for the project. Study Team members are available to attend neighborhood, business, and community organization meetings by request. The Study Team sent an invitation letter to more than 30 organizations along the corridor inviting them to request a speaker. The Study Team also posted a speaker's bureau request form on the project website. As of June 2009, Study Team members have presented at seven community

What is a Speaker's Bureau?

The I-70 FTEIS Speaker's Bureau includes designated Study Team members who will attend neighborhood, business, and/or community meetings, by request, to discuss the I-70 FTEIS project.

group meetings. The Study Team presented at the following the community group meetings:

- Carriage Hills Neighborhood Watch Association
- MARC Total Transportation Policy Committee
- Kansas City Chamber of Commerce Transportation Committee
- Downtown Council Infrastructure Committee
- Columbus Park Community Council
- Kansas City Transportation Authority Industry Day Convention
- Heritage Park Condominium Association

MoDOT staff also attended the public hearing for the I-435/Manchester Interchange project and setup a table to provide information for the I-70 FTEIS project.

Newsletters, Postcards, and Flyers: The Study Team used a series of newsletters, postcards, and flyers to provide information about the project, upcoming public involvement opportunities, to invite people to access the project website, and to invite them to sign-up on the project mailing list. They were made available at meetings and placed on the project website. Further newsletters will be developed for the Public Hearing and the Final FTEIS.



September Public Meeting

What Public Meetings did MoDOT hold for the project?

MoDOT held two rounds of public outreach prior to the publication of this draft FTEIS. Public meetings or listening posts allowed members of the public to speak one on one with the Study Team. All meetings were held in an open house format over two to three hours and members of the public could stop by at any time during the meetings.

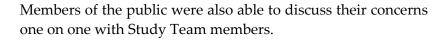
September 2008 Meetings

The first series of public meetings were held in September 2008, details are shown in **Table 4.2**. The purpose of the first set of meetings was to:

- Introduce the project
- Explain why improvements are needed
- Discuss environmental constraints
- Provide information on the initial concepts for improving I-70

Members of the public attending the meeting were asked the following three questions:

- What are the problems in the corridor?
- What needs to be fixed and how would you fix it?
- How does the corridor affect your everyday life?





Public Meeting

Table 4.2 Public Meetings

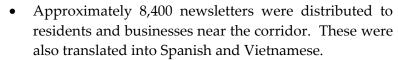
Mastina Data and		
Meeting Date and Time Location		Meeting Type
	Location	Wieeting Type
September 9, 2008	St. Paul School of Theology, Holter Center	Weekday Evening
4 pm to 7 pm	Cafeteria (5123 E. Truman Road, Kansas City)	Public Open House
September 11, 2008	Truman High School	Weekday Evening
4 pm to 7 pm	(3301 S. Noland Road, Independence)	Public Open House
September 13, 2008	Central High School	Saturday Morning
9 am to 11 am	(3221 Indiana Avenue, Kansas City)	Public Coffee and Open
		House
September 27, 2008	Don Bosco Senior Center (580 Campbell	Saturday Morning
9 am to 11 am	Street, Kansas City)	Public Coffee and Open
		House

The September 2008 public meetings were promoted through the following methods:

 Approximately 2,700 post cards were distributed to residents and businesses near the corridor. Post cards with Spanish and Vietnamese translations were sent to encourage participation of these language groups that live in the Study Area.

What is an umbrella organization?

An umbrella organization is an association of industry specific business, groups, or companies who work together. Example – Chambers of Commerce.



- Approximately 300 flyers were mailed to umbrella organizations, agencies, businesses, and public officials.
- A media release was sent by MoDOT to local media outlets in the Kansas City area.

The September public meetings attracted 54 members of the public. In an effort to increase the public's participation, the Study Team changed their approach for the next round of public outreach. In January 2009, MoDOT held an on-line meeting and a Listening Post.

January 2009 On-line Public Meeting

MoDOT posted the First Tier Strategies on the project website for public review and comment from January 2nd to January 31st as part of an on-line public meeting. The on-line meeting provided an interactive PowerPoint presentation that each visitor could view at their pace, provide blog comments, and e-mail comments to MoDOT.

January 6, 2009 Listening Post

MoDOT held an open house listening post on January 6, 2009 at the Holter Center, St. Paul's School of Theology. This listening post allowed members of the public to view and comment on the First Tier Strategies for improving I-70. The listening post included displays as well as laptop computers that members of the public could use to access the on-line public meeting.

The on-line meeting and listening post were promoted through the following methods:

 Approximately 3,070 post cards were distributed to residents and businesses near the corridor. Post cards with Spanish and Vietnamese translations were sent to encourage participation of these language groups that live in the Study Area.



Listening Post

- Newsletters were sent to prior meeting attendees and members of the project mailing list.
- A media release was sent by MoDOT to local media outlets in the Kansas City area.
- Details of the meeting were posted on the Kansas City Scout electronic variable message signs along the corridor from December 31, 2008 to January 31, 2009.

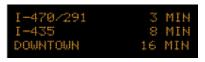
More than 940 individuals visited the on-line public meeting. The website has an online comment and question form that can be filled out and sent to the Study Team. The comment form is also available in Spanish and Vietnamese, two prevalent languages spoken in the Study Area. More than 120 people have sent comments or requested information from the website.

What Other Activities and Meetings Did MoDOT Use to Involve the Public?

<u>Mobile Voice Van</u>

MoDOT vinyl wrapped an existing 12-passenger van, provided a display tent, and backdrop to share information about the First Tier strategy packages with the community. The van was stationed for two-hours at the following events:

- Kansas City Chiefs Football Game on December 21, 2008
- Wal-Mart Super Center on Blue Ridge Boulevard in Independence, MO on January 9, 2009.



KC SCOUT message sign

What is Kansas City Scout?

Kansas City Scout is the metropolitan region's traffic management system that provides traveler information to the public through the local media, variable message signs, and the internet.



Mobile Voice Van Event



Members of the Study Team circulated the event location to talk with the community about the project and distributed "Contact Us" business cards.



Front of the "Contact Us" business card



Back of the "Contact Us" business card

How Did MoDOT Provide Information Through the Media?

MoDOT uses a variety of media outlets to provide public meeting information. For the I-70 FTEIS, press releases were sent to 87 representatives of Kansas City area newspapers, television stations, and radio stations.

What are the Next Public Participation Steps?

There will be a public hearing on the Draft FTEIS in the Fall of 2009.

List of Preparers and Reviewers

FEDERAL HIGHWAY ADMINISTRATION

Peggy Casey: FHWA (Division Office), Environmental Projects Engineer, 33 years experience with FHWA.

B.S. Civil Engineering: University of Wisconsin, 1975.

Roopa Banerjee: FHWA (Division Office), Transportation Engineer, 1 year experience with FHWA.

B.S. Civil Engineering: University of Louisiana, 1992.

MISSOURI DEPARTMENT OF TRANSPORTATION

Allan Zafft: MoDOT (District 4), Transportation Planning Coordinator, 8 years experience with MoDOT.

M.P.A. Public Administration: University of Nebraska-Omaha, 2003 B.S. Business Administration: University of Nebraska-Lincoln, 1998

Matt Burcham: MoDOT (Central Office), Senior Environmental Specialist, 15 years experience with MoDOT.

B.S. Agriculture: Kansas State University, 1984.

Lee Ann Kell: MoDOT (District 4), District Planning Manager, 21 years experience with MoDOT.

B.S. Civil Engineering: University of Missouri-Rolla, 1988

Joshua Scott: MoDOT (District 4), Senior Highway Designer, 10 years experience with MoDOT. B.S. Civil Engineering: Iowa State University, 1998

Gerri Doyle: MoDOT (District 4), Senior Transportation Planner, 2 years experience with MoDOT.

M.A. Urban Planning: University of Kansas, 1996 B.A. Political Science: William Jewell College, 1991

Allan Ludiker: MoDOT (District 4), Transportation Project Manager, 14 years experience with MoDOT.

B.S. Civil Engineering: University of Missouri-Rolla, 1995

Richard Orr: MoDOT (District 4), Transportation Project Manager, 15 years experience with MoDOT.

B.S. Civil Engineering: University of Missouri-Kansas City, 1993

Jeffrey Hardy: MoDOT (District 4), Transportation Project Manager, 2 years experience with MoDOT.

B.S. Civil Engineering: University of Missouri-Columbia, 1992

B.S. Agricultural Engineering: University of Missouri-Columbia, 1992

Mark Stock: MoDOT (District 4), Area Engineer, 25 years experience with MoDOT.

B.S. Civil Engineering: University of Missouri-Rolla, 1984

Jesse Skinner: MoDOT (District 4), Area Engineer, 10 years experience with MoDOT.

B.S. Civil Engineering: University of Missouri-Columbia, 1999

Mary Miller: MoDOT (District 4), Assistant District Construction and Materials Engineer, 14 years experience with MoDOT.

B.S. Civil Engineering: University of Kansas, 1995

Steve Porter: MoDOT (District 4), Senior Community Relations Specialist, 10 years experience with MoDOT.

B.A. English: University of Missouri-Kansas City, 1972

Timothy Holman: MoDOT (District 4), Right of Way Manager, 17 years experience with MoDOT.

M.B.A.: William Woods University, 1995

B.A. Business Administration: Missouri Western State College, 1991

Joe Donner: MoDOT (District 4), Assistant Right of Way Manager-Certified, 17 years experience with MoDOT.

M.A. Economics: University of Missouri-Kansas City, 1980

B.A. Philosophy: Immaculate Conception Seminary, 1969

Scott Thurston: MoDOT (District 4), Certified Appraiser, 5 years experience with MoDOT.

B.A. Business Administration: Mid America Nazarene University, 2001

Shari Severeid: MoDOT (District 4), Certified Appraiser, 9 years experience with MoDOT.

Toni Prawl: MoDOT (Central Office), Historic Preservation Specialist, 16 years experience with MoDOT.

Ph.D. Art History (Historic Preservation Emphasis): University of Missouri-Columbia, 1994.

M.A. Housing and Interior Design: University of Missouri-Columbia, 1986

B.S. Secondary Education (Vocational Home Economics): Northwest Missouri State University, 1984

B.S. Home Economics (Housing, Interiors, and Related Arts): Northwest Missouri State University, 1984

Charles Pursley: MoDOT (Central Office), Design Liaison Engineer, 25 years experience with MoDOT.

B.S. Civil Engineering: University of Missouri-Rolla, 1984

James Harcourt: MoDOT (Central Office), Senior Historic Preservation Specialist, 15 years experience with MoDOT.

M.A. Anthropology: University of Arkansas, 1991

B.A. Anthropology: Ithaca College, 1979

Kevin McHugh: MoDOT (Central Office), Senior Environmental Specialist, 14 years experience with MoDOT.

M.A. Architectural History: University of Virginia, 1988

B.G.S. Art History: University of Kansas, 1982

Alan Leary: MoDOT (Central Office), Senior Environmental Specialist, 7 years experience with MoDOT.

M.S. Biology: Boise State University, 1996

B.S. Wildlife Management and Biology: University of Wisconsin-Stevens Point, 1991

Laura Ruman: MoDOT (Central Office), Senior Environmental Specialist, 4 years experience with MoDOT.

M.S.E.S. Applied Aquatic Ecology: Indiana University School of Public and Environmental Affairs, 1999

B.S. Biology: University of Michigan, 1995

Stan Thessen: MoDOT (Central Office), Senior Environmental Specialist, 2 years experience with MoDOT.

B.S. Agriculture: Lincoln University, 1993

Eric Curtit: MoDOT (Central Office), Long-Range Transportation Planning Coordinator, 14 years with MoDOT.

B.S. Business Administration: Columbia College, 1996

WILBUR SMITH ASSOCIATES

Chris Nazar: Wilbur Smith Associates (Kansas City Office), Senior Environmental Project Manager, 8 years with Wilbur Smith Associates.

M.S. Urban Planning: University of Toronto, 2001

B.A. Economics and Urban Studies: University of Toronto, 1999

Robert Orr: Wilbur Smith Associates (Kansas City Office), Kansas City Division Manager, 3

years with Wilbur Smith Associates.

M.S. Geology: University of Missouri, 1998 B.S. Geology: University of Missouri, 1987 B.S. Education: University of Missouri, 1987

Randy Rowson: Wilbur Smith Associates (Kansas City Office), Senior Transportation Planner, 11 years with Wilbur Smith Associates.

M.A. Urban and Regional Planning: University of Iowa, 1992

B.A. Economics: University of Northern Iowa, 1989

Gina Hershberger: Wilbur Smith Associates (Kansas City Office), Transportation Planner, 3 years with Wilbur Smith Associates.

M.A. Urban Planning: University of Kansas, 2005

B.A. Architectural Studies: University of Kansas, 2007

Steve Hamadi: Wilbur Smith Associates (Kansas City Office), Senior Transportation Project Manager, 1.5 years with Wilbur Smith Associates.

B.S. Civil Engineering: University of Missouri-Rolla, 1987

Tom Engel: Wilbur Smith Associates (Kansas City Office), Senior Transportation Engineer, 1 year with Wilbur Smith Associates.

B.S. Civil Engineering: Washington University, 1978

Mary Malone: Wilbur Smith Associates (Kansas City Office), Staff Assistant II, 2 years with Wilbur Smith Associates.

B.S. Psychology: Rockhurst University, 1980

Lindsay Maki: Wilbur Smith Associates (Lansing Office), GIS Analyst/Transportation Planner, 4 years with Wilbur Smith Associates.

B.A. Geography: Michigan State University, 2005

Jim Koenig: Wilbur Smith Associates (Lansing Office), Planning Analyst, 2 years with Wilbur Smith Associates.

M.A. City and Regional Planning: The Ohio State University, 2007

B.S. Geography: Eastern Michigan University, 2001

HNTB

Charles Miller: HNTB Corporation (Kansas City Office), Senior Project Manager, 23 years with HNTB.

Ph.D. Civil Engineering: Vanderbilt University, 1999 M.S. Civil Engineering: University of Kansas, 1990 B.S. Civil Engineering: University of Kansas, 1985

Joe Blasi: HNTB Corporation (Kansas City Office), Transportation Planning Engineer, 5 years with HNTB.

M.S. Transportation Engineering: Washington University, 2004

B.S. Civil Engineering: Washington University, 2004

Gretchen Ivy: HNTB Corporation (Kansas City Office), Project Manager, Environmental Planning, 11 years with HNTB.

M.S. Engineering Management: University of Kansas, 2006

B.S. Civil Engineering: University of Missouri-Columbia, 1998

Derek Vap: HNTB Corporation (Kansas City Office), Engineer I – Highway Design, 2 years with HNTB.

M.S. Civil Engineering: University of Missouri-Columbia, 2007

B.S. Civil Engineering: University of Missouri-Columbia, 2006

Jim Kinder: HNTB Corporation (Kansas City Office), Senior Project Manager, 23 years with HNTB.

B.S. Civil Engineering: University of Missouri-Columbia, 1986

VOLKERT AND ASSOCIATES

J. T. Yarnell: Volkert & Associates (Jefferson City Office), Senior Associate, 2 years with Volkert & Associates.

B.S. Civil Engineering: University of Kansas, 1965

Bridgett Jacquot: Volkert & Associates (Collinsville Office), Environmental Manager, 2 years with Volkert & Associates.

M.S. Environmental Studies: Southern Illinois University-Edwardsville, 1999

B.S. Environmental Biology: Eastern Illinois University, 1997

MUSTARDSEED CULTURAL AND ENVIRONMENTAL SERVICES

Timberlyn Smith: Mustardseed Cultural and Environmental Services, President/Environmental Program Manager, 6 years with Mustardseed Cultural and Environmental Services.

M.A. Biology: University of Missouri-Kansas City, 1984

B.A. Biology and B.A. Chemistry: William Jewell College, 1979

Ike Francis: Mustardseed Cultural and Environmental Services, Vice President/Cultural Resource Manager, 6 years with Mustardseed Cultural and Environmental Services.

Ph.D. Anthropology: Oxford University, 1986 M.S. Archaeology: Oxford University, 1982 B.S. Archaeology: Oxford University, 1980

ENVIRONMENTAL ADVISORS & ENGINEERS

Alan Mitchell: Environmental Advisors and Engineers, Inc., Environmental Engineer, 4 years with EAE, Inc.

B.S. Engineering: Southern Illinois University, 1983

Mark A. Griffith: Environmental Advisors and Engineers, Inc., Environmental Scientist/Senior Ecologist, 11 years with EAE, Inc.

M.A. Environmental Studies: University of Kansas, 1989

B.A. Environmental Studies: University of Kansas, 1977

Gale Wright: Environmental Advisors and Engineers, Inc., Senior Environmental Engineer, 11 years with EAE, Inc.

M.S. Sanitary Engineering: University of Missouri-Columbia, 1970

B.S. Civil Engineering: University of Missouri-Columbia, 1968

Jill Biesma: Environmental Advisors and Engineers, Inc., President, 11 years with EAE, Inc.

M.S. Civil Engineering - Water Resources: Colorado State University, 1987

B.S. Civil Engineering: South Dakota State University, 1981

Linda Batrick: Environmental Advisors and Engineers, Inc., Chemical Engineer, 5 years with EAE, Inc.

B.S. Chemical Engineering: University of Missouri-Columbia, 1982

STAPLETON LAW

John Stapleton, Jr.: Stapleton Law Firm, 20 years with Stapleton Law Firm.

J.D. Law: St. Louis University, 1986

M.A. Regional and Community Planning: Kansas State University, 1982

B.S. Psychology: Kansas State University, 1978

PATTI BANKS ASSOCIATES

Triveece Harvey: Patti Banks Associates (PBA), Project Manager, 4 years with PBA.

M.A. Urban Planning: University of Kansas, 2002

B.A. Architectural Studies: University of Kansas, 2000

Circulation List

U. S. Senators

Christopher S. Bond Claire McCaskill

U. S. Representatives

Emanuel Cleaver

Governor

Jeremiah Nixon

State Senators

Matt Bartle Victor Callahan

State Representatives

Leonard Hughes IV Paul LeVota

Tom McDonald

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Mike Talboy

Shalonn Curls

Federal Government Agencies

Advisory Council on Historic Preservation

Centers for Disease Control and Prevention, National Center for Environmental Health

Department of Energy

Department of Health and Human Resources

Federal Emergency Management Agency

Federal Railroad Administration

U.S. Army Corps of Engineers

U.S. Coast Guard, Bridge Branch

U.S. Department of Agriculture/NRCS

U.S. Department of Housing and Urban Development

U.S. Department of the Interior

U.S. Department of the Interior, National Park Service, Midwest Field Area

U.S. Environmental Protection Agency

U.S. Environmental Protection Agency, Region VII

U.S. Fish and Wildlife Service

State Government Agencies

Missouri Department of Conservation

Missouri Department of Conservation, Regional Forestry

Missouri Department of Natural Resources

Missouri Federal Assistance Clearinghouse

Missouri NRCS Clay and Jackson Field Office

Missouri Emergency Management Agency

State Historic Preservation Office

Local Agencies

City of Independence, Missouri

City of Kansas City, Missouri

City of Kansas City, Missouri Planning and Development

Independence Chamber of Commerce

Independence Council for Economic Development

Independence Economic Development Corporation

Jackson County - County Executive Office

Jackson County - Public Works

Kansas City Chamber of Commerce

Kansas City Economic Development Corporation

Other Agencies and Special Interest Groups

Black Chamber of Commerce

Hispanic Chamber of Commerce

Kansas City Area Transit Authority

Kansas City SmartPort

Local Initiatives Support Corportion (LISC)

Mid-America Regional Council

Regional Transit Alliance

CHAPTER 7

List of Acronyms

AADT Average Annual Daily Traffic

AASHTO American Association of State Highway Officials

ACHP Advisory Council of Historic Preservation

ADA American Disability Act
APE Area of Potential Effect
BMPs Best Management Practices

BRT Bus Rapid Transit CAA Clean Air Act

CAAP Clean Air Action Plan
CBD Central Business District
CE Categorical Exclusion

CERCLIS Federal Comprehensive Environmental Response Compensation and Liability

Information System

CID Community Improvement District

CSA Combined Statistical Area

CWA Clean Water Act

DEIS Draft Environmental Impact Statement

DOT Department of Transportation
EA Environmental Assessment
EIS Environmental Impact Statement
EPA Environmental Protection Agency

ESA Endangered Species Act

FEIS Final Environmental Impact Statement FEMA Federal Emergency Management Agency

FHWA Federal Highway Administration

FIS Flood Insurance Study

FTEIS First Tier Environmental Impact Statement

GIS Geographic Information Systems

GPS Global Positioning System
HCS Highway Capacity Software
HOT High Occupancy Toll lanes
HOV High Occupancy Vehicle lanes

HUC Hydrologic Unit Code

KC MetroKansas City Metropolitan AreaKCATAKansas City Area Transit Authority

LOS Level of Service

I-70 First Tier Draft EIS

List of Acronyms 7-1

LQG Large Quantity Generator

LRTP Long Range Transportation Plan
LWCF Land and Water Conservation Fund
MARC Mid-America Regional Council

MDC Missouri Department of Conservation

MERIC Missouri Economic Research and Information Center

MIS Major Investment Study MLS Multiple Listing Service

MoDNR Missouri Department of Natural Resources MoDOT Missouri Department of Transportation

MSA Metropolitan Statistical Area MSATs Mobile Source Air Toxics

NAAQS National Ambient Air Quality Standards

NAC Noise Abatement Criteria

NEPA National Environmental Policy Act
NFRAP No Further Remediation Action Planned
NRCS Natural Resource Conservation Service
NRHP National Register of Historic Places

NWI National Wetland Inventory

RCRA Resource Conservation and Recovery Act
REC Recognized Environmental Conditions

ROD Record of Decision

SEMA State Emergency Management Agency
SHPO State Historic Preservation Office
SIU Section of Independent Utility

SWPPP Soil and Water Pollution Prevention Plan

TESS Threatened and Endangered Species System

Transportation Demand Management

TIF Tax Increment Financing
TMDL Total Maximum Daily Load
TMP Traffic Management Plan
TNM Traffic Noise Model

TOD Transit Oriented Development

TSDF Treatment, Storage, or Disposal Facility
TSM Transportation System Management
USACE United States Army Corps of Engineers
USDA United States Department of Agriculture
USFWS United States Fish and Wildlife Service

USGS United States Geological Survey
VAII Visual Assessment Unit

VAU Visual Assessment Unit VMT Vehicle Miles Traveled

VOC Volatile Organic Compound

TDM

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Disclaimer

APPENDIX A

Traffic Accident and Safety Data

The National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321-4370f, requires that this analysis of the proposed project must consider and discuss its effects and impacts on mankind, and its effects and impacts on plants, animals, resources, and the natural world in general. One of the key elements to be discussed in any NEPA analysis of a proposed highway project is its effects and impacts on the safety of those who use those highways. However, Congress has recognized that even while this document summarizes and presents traffic accident and safety information for the general benefit of the public, pursuant to federal law, some people may attempt to use the information to establish federal, state or local liability in lawsuits arising from highway accidents. Congress has enacted a law, 23 USC Section 409, which prohibits the discovery or use, in litigation, of highway accident and safety data, developed under federal law to make highway safety improvements. Congress's rationale is obvious: the safety data was compiled and collected at their request, to help prevent future accidents, injuries and death on our nation's highways. If that information can be used in expensive damage suits, then the millions of dollars that litigation may cost the Missouri Department of Transportation (MoDOT) and local governments will not be available for their use to make Missouri's highways safer. The collection of this safety data should be encouraged, not discouraged.

Traffic accident statistics and safety data are compiled, presented and summarized in portions of this NEPA document. Where noted in an introductory footnote to a segment of this document, the discussions, reports, lists, tables, diagrams and data presented throughout that chapter, unit, section or subsection were compiled or collected for the purpose of identifying, evaluating or planning the safety enhancement of potential accident sites or hazardous roadway conditions pursuant to federal law. Thus, that information and its supporting reports, schedules, lists, tables, diagrams and data are not subject to discovery, and they are prohibited by federal law (23 USC § 409) from being admitted into evidence in a federal or state court proceeding, or from being considered for other purposes, in any action for damages arising from an occurrence on the highways, intersections or interchanges discussed in this document.

Appendix B	
	Purpose and Need Technical Memorandum

October 2008 PURPOSE AND NEED TECHNICAL MEMORANDUM

This document discusses the basic information underlying the I-70 First Tier Environmental Impact Statement (FTEIS) including what the project is about, where it is located, and why improvements are needed to I-70 on the Missouri side of the Kansas City Metropolitan Area (KC Metro).

What is the I-70 First Tier Environmental Impact Statement?

The Missouri Department of Transportation (MoDOT) and the Federal Highway Administration propose improving the existing I-70 corridor extending approximately 18 miles from the end of the last ramp termini east of the Missouri and Kansas state line to east of the I-470 interchange, including the Kansas City, Missouri Downtown Freeway Loop to meet the current and future traffic, safety, and access needs within the corridor. The I-70 FTEIS will:

- Provide an overview and description of the Study Area.
- Identify the current and future needs.
- Determine potential improvement strategies to address those needs.
- Evaluate the human and natural environmental effects of the strategies developed.
- Identify a preferred strategy.

The proposed action for the I-70 FTEIS is to seek the most effective approach to improve the corridor to meet the current and future transportation needs while minimizing impacts to the human and natural environment. The I-70 FTEIS will evaluate strategies that address travel demand and the overall performance of the corridor for safely moving people and goods. This will enable program decisions to address corridor-wide transportation system issues while leaving location specific decisions for the subsequent second tier environmental documents.

What is a Purpose and Need Statement?

A Purpose and Need Statement identifies the reasons a proposed project is needed. Potential alternative solutions or strategies are then evaluated based on their ability to meet these project needs as well as their environmental impacts.

What is meant by improvement strategies?

Improvement strategies are general, high level transportation improvement opportunities to address the transportation issues along I-70. Improvement strategies may include a series of specific transportation improvements such as adding lanes, fixing existing pavement and bridges, improving interchange ramps, and/or transit projects.

What is the I-70 FTEIS Study Area?

The I-70 FTEIS Study Area is located entirely in Jackson County, Missouri and includes all land within 100 feet of the existing highway right-of-way along the corridor and within 300 feet of interchanges along the existing alignment of I-70 extending approximately 18 miles from the end of the last ramp termini east of the Missouri and Kansas state line to east of the I-470 interchange, including the Kansas City, Missouri Downtown Freeway Loop. An expanded Study Area consisting of 1,000 feet on either side of the highway including the downtown loop, is being evaluated for land use and socioeconomic studies. For most of this length, I-70 is a four or six-lane divided and fully access-controlled interstate facility. The I-70 FTEIS Study Area is shown in **Figure 1**.

Explain the Tiered Document Process:

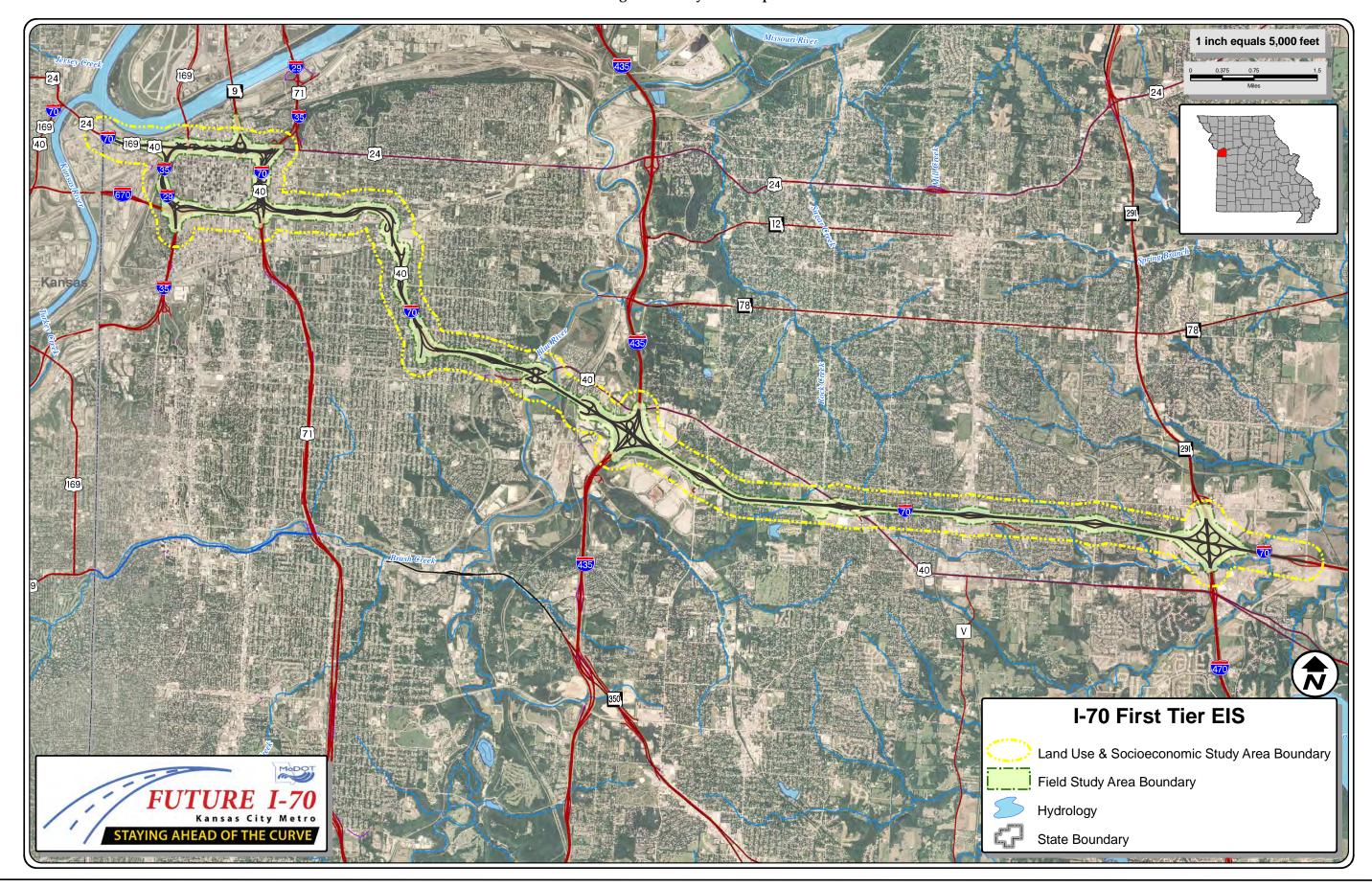
The I-70 FTEIS in KC Metro is following a tiered environmental documentation process. Tiering complies with requirements of the National Environmental Policy Act (NEPA) and other environmental regulations. First tier documents address broad programs or overall corridor strategies and issues in an initial, higher level environmental impact analysis. More specific proposals and impacts are analyzed in subsequent second tier studies. The tiered process enables a decision-making process that focuses on issues that are ready for decision and reduces repetition in environmental documentation. First tier documents frame and narrow the boundaries and scope for second tier projects.

One way to imagine the tiered process is as an umbrella. In the I-70 FTEIS, the umbrella extends approximately 18 miles from the end of the last ramp termini east of the Missouri and Kansas state line to east of the I-470 interchange, including the Kansas City, Missouri Downtown Freeway Loop. An overall improvement strategy for this corridor will be developed and a broad, general (high level) evaluation will be conducted. This corridor umbrella covers and identifies future detailed second tier project level studies of shorter sections, which will

What is the National Environmental Policy Act (NEPA)?

The National **Environmental Policy Act** (NEPA) is a United States environmental law that was the establishment of a U.S. national policy promoting the enhancement of the environment. One of its most significant effects was to establish the requirements for evaluating the environmental impacts of federal projects and projects using federal funding.

Figure 1: Study Area Map



I-70 First Tier Purpose and Need

What is a SIU?

A Section of Independent Utility (SIU) is a section of a larger project that can function on its own, without further construction of an adjoining road section required. have their own future environmental evaluation documents. The second tier studies will analyze shorter portions of I-70 but in greater detail.

During the first tier process, the Study Team will seek the following outcomes:

- Approval of a preferred strategy for improving I-70 in KC Metro including a plan for prioritizing the improvements.
- Identification of portions of I-70 in KC Metro that can be considered "sections of independent utility" for analysis in future second tier studies.
- Environmental documentation that can be referenced by second tier studies and reduce the amount of duplication between studies.
- Public and agency consensus and understanding around the overall improvement plan.

Why is I-70 in KC Metro Important?

The 18 mile I-70 corridor and the entire downtown loop that is the subject of this FTEIS, is vital to serving the greater Kansas City, Missouri, regional transportation demands including commuters, transit, and local and national freight movements. In addition to serving local needs, I-70 in KC Metro is also the main artery for traffic traveling to and from other cities and places across the state and nationally. Some of the interstate traffic heading east and west through Kansas City is bound for major population centers in Missouri and other adjacent states of Kansas, Nebraska, Iowa, and Illinois.

What Studies Were Completed for the Corridor before the FTEIS?

In 2000, MoDOT, the Mid-America Regional Council (MARC), and the Kansas City Area Transportation Authority (KCATA) began the I-70 Major Investment Study (MIS) to evaluate the challenges and opportunities associated with I-70 in Jackson County. The I-70 MIS established a planning horizon from 2003 to 2025, and involved a planning process to evaluate long-term transportation needs in the I-70 corridor. The purpose of the MIS was to identify the challenges, needs,

goals, and objectives for the corridor as well as develop and analyze potential major transportation system improvement strategies. The I-70 MIS was completed in November 2004.

The I-70 FTEIS in KC Metro will build on the efforts of the I-70 MIS as well as other system planning studies that have been or are being completed in the Study Area. The I-70 FTEIS will consider the strategies developed as part of the I-70 MIS as well as developing and evaluating new ideas within the context of the most current data and according to the requirements of NEPA. The result will be a refinement of the transportation improvement strategies and an environmental evaluation of these strategies.

The I-70 Transit Alternatives Analysis prepared by MARC in June 2005, supplemented the I-70 MIS by providing additional detail on transit alternatives options. The purpose of the I-70 Transit Alternatives Analysis was to provide necessary documentation to enable a decision for the locally preferred transit strategy within the corridor. The results of this study along with any updates made in 2008 will also be part of the strategies for the FTEIS.

How does this study differ from the I-70 statewide studies?

The I-70 FTEIS in KC Metro is a separate and distinct study from the I-70 study being conducted statewide in Missouri. The I-70 statewide study essentially covers I-70 between St. Louis and Kansas City (I-470). The focus of the I-70 statewide study is to evaluate the viability of using truck only lanes as part of future I-70 improvements across the state.

The I-70 FTEIS in KC Metro is focused on broad improvement strategies for a specific 18 mile corridor and the downtown loop within the urbanized Kansas City area. The needs of I-70 in the Kansas City area are different from the needs statewide and the I-70 FTEIS is not focused on truck only lanes. The I-70 FTEIS will be coordinated with the statewide study; however, they are separate projects.

Why are improvements needed along I-70 in KC Metro?

The overall purpose of the I-70 FTEIS is to determine an improvement strategy for the corridor, including future capacity and mode choices, which addresses the following items.

- *Improve Safety*: Reduce crash rates and crash severity on I-70 and the downtown loop.
- <u>Reduce Congestion:</u> Remove key bottlenecks; reduce the potential for ramp back-up onto the freeway; and improve multi-modal travel times in coordination with plans put forward by local and regional agencies.
- <u>Restore and Maintain Existing Infrastructure:</u> Improve bridge and pavement conditions on I-70 and the downtown loop and implement cost-effective investment strategies.
- <u>Improve Accessibility:</u> Provide travel options for all residents; increase safe access across I-70 and the downtown loop for non-motorized travel; support local and regional land use plans.
- *Improve Goods Movement:* Improve the efficiency of freight movement on I-70 and the downtown loop.

Each of the above elements of the purpose and need for improvements is discussed in more detail in the paragraphs below.

Improve Safety

Improving safety within the I-70 FTEIS Study Area must be a key element of improvement strategies. Traffic crashes cost the travelers of I-70 in a variety of ways. Some crashes cost lives, cause severe injury, or result in property damage. Traffic crashes also create congestion from blocked travel lanes resulting in increased gas consumption and lost time. Study Area improvements must work to reduce the crash rates compared to the statewide average and to reduce the crash severity.

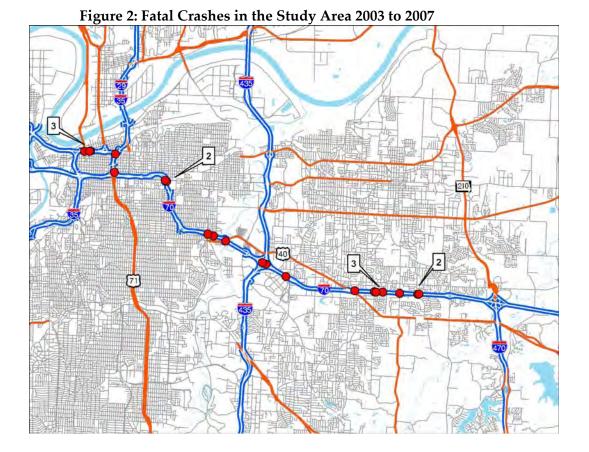
Crash data were obtained from MoDOT and MARC from 2003 to 2007. The crash data were evaluated and five year crash

What is a bottleneck?

A bottleneck is a section of a road where movement of traffic is limited by the road design. This is often a section of road with a fewer number of lanes, a sharp curve, or traffic joining the road at an interchange. A bottleneck is the most vulnerable point for congestion in a road network and is also referred to as a chokepoint.

rates were developed across the corridor. The Study Team identified rates that were more than 150 percent of the statewide average as undesirable. Rates between 100 percent and 150 percent of the statewide average are defined to be approaching undesirable characteristics. Any rates equal to or less than the statewide average were categorized as adequate, but the Study Team will look at potential improvements that will reduce crash rates throughout the corridor.

In the five year period 2003 to 2007, 20 crashes within the Study Area involved a fatality. The locations of those fatal crashes are shown in **Figure 2**. The crash rate data is shown in **Table 1**.



The locations with the highest crash rates between 2003 and 2007 are the downtown loop, westbound from the Benton curve to the downtown loop, eastbound from the Jackson curve to I-435, and at the I-435 interchange. The locations that were identified in the I-70 MIS as having the highest crash rates between 1996 and 1998 were between Manchester Trafficway and Blue Ridge Cut-Off, and in the vicinity of the U.S. 40 East interchange.

Table 1: Summary of Crash Analysis for the Period 2003-2007

			2003 to 2007 Crash Rate		5 Year Crash Rate versus	
			(Crashes Per 100 Million		Statewide Average Crash	
			Vehicle Miles of Travel)		Rate* (107.82)	
Analysis Sections		(miles)	Eastbound	Westbound	Eastbound	Westbound
1	Downtown Loop	3.45	340.50		316%	
2	Paseo Interchange	0.86	161.41	227.10	150%	211%
3	Benton Curve	1.20	154.84	211.11	144%	196%
4	23rd Street Interchange	0.67	93.76	61.35	87%	57%
5	Jackson Curve	0.88	234.57	90.07	218%	84%
6	Van Brunt Interchange	0.73	238.13	128.44	221%	119%
7	U.S. 40 West Interchange	0.59	186.80	98.21	173%	91%
8	Manchester Interchange	0.57	211.48	114.95	196%	107%
9	I-435 Interchange	0.96	189.01	213.37	175%	198%
10	Blue Ridge Cut-Off Interchange	1.28	136.12	149.12	126%	138%
11	U.S. 40 East Interchange	1.60	141.61	114.05	131%	106%
12	Noland Road Interchange	1.50	140.11	132.24	130%	123%
13	Lee's Summit Road Interchange	1.35	113.50	106.52	105%	99%
14	I-470 Interchange	1.51	131.95	111.28	122%	103%

^{*}Statewide average crash rate for urban interstates.

Shading indicates sections which exceed the statewide average crash rates by more than 150 percent.

The downtown loop, the I-435 interchange, and an additional four sections eastbound and two sections westbound are defined as undesirable because the crash rate exceeds 150 percent of the statewide average rate of 107.82 crashes per 100 million vehicle miles of travel. The downtown loop and the locations around the Benton-Jackson curves have noticeably high crash rates. The part of I-70 where crash rates increased most significantly during the period from 2003 to 2007 compared to the period from 1996 to 1998 is the Benton-Jackson curves (approximately 25% higher). The crash rates between the Blue Ridge Boulevard and U.S. 40 East interchanges showed the largest reductions.

The majority of the crashes are rear end (53%) followed by passing and out of control (approximately 18% each). Rear end collisions often occur in congested areas as drivers fail to stop for slow moving traffic. Approximately 78 percent of the total crashes cause property damage only and approximately 22 percent cause injury. Approximately 23 percent of all crashes occur in dark conditions and approximately 19 percent occur in icy/snow/wet pavement conditions. Approximately 30 percent occur during the weekday peak period of traffic (7-9 a.m. and 4-6 p.m.), which has the largest effect on delay for motorists. Further data on crash history of the Study Area is located in **Appendix A**.

Reduce Congestion

I-70 has outlasted its original design life of 20 years and has carried traffic volumes of both cars and heavy trucks that have far exceeded original expectations. Traffic growth on I-70 and the downtown loop is the result of population and economic growth in the Kansas City Metropolitan Area and growth in trips through the region by cars and trucks. The Kansas City Metropolitan Area has experienced population growth of 28 percent between 1970 and 2000 with expectations of an additional 21 percent growth in population by 2030 based on forecasts by the Census Bureau and the Mid-America Regional Council. Jackson County population growth is expected to be near nine percent between 2000 and 2030. Within the Study Area, population growth is focused around Independence and further east in Blue Springs. Additional population growth data is contained in **Appendix B**.



I-70 Eastbound at Lister

The I-70 MIS developed an extensive inventory of locations that generate and attract trips along I-70 in the Study Area. An understanding of these locations can help to more fully understand travel needs along the corridor, as well as assist locating freeway interchanges and transit stops.

The I-70 MIS reported that the key residential centers affecting I-70 traffic are generally in the middle to outer portions of the Study Area along with those outside the Study Area in locations such as Blue Springs, Lee's Summit, and the Country Club Plaza area. The MIS also reported that the major employment centers affecting I-70 traffic are generally located between downtown Kansas City and the Country Club Plaza, along Ward Parkway, and along Bannister Road. The major shopping areas are the Country Club Plaza, Blue Ridge Crossing, Independence Center and other developments near the I-70 and I-470 interchange, and in Lee's Summit. Other major trip attractors are located between the Country Club Plaza and I-435. Figure 3 illustrates some of the key regional traffic attractions and truck generators that affect this portion of I-70. Additional detail on trip generators and attractions are in **Appendix C**.

As a result of population growth, the general locations of jobs in relation to locations where people live, and the shopping and entertainment areas, the I-70 traffic volumes have been steadily increasing over the past 30 years. The completion of regional highway improvement (Bruce R. Watkins and Three Trails Crossing) projects in the early 2000s resulted in some traffic diversion away from I-70. Some representative 2005 volumes are shown in **Figure 4**.

Commuter traffic in the study corridor is highly directional with the majority of traffic destined towards the Kansas City Central Business District (CBD) during the morning and away from the CBD during the afternoon peak periods.

Figure 3: Major Regional Traffic Generators 1 inch equals 2 miles Truck Generator Downtown West Bottoms/UPS Truck Generator Sprint Center Lake City Ammunition Plant 18th & Vine District Crown Center Yellow Trucking Lipton Tea Westport Independence Mall [169] Jackson County Sports Complex Bass Pro Shops Country Club Plaza Blue Ridge Crossings Kohl's Distribution Center Bannister Road Federal Complex I-70 First Tier EIS FUTURE I-70
Kansas City Metro Hydrology State Boundary STAYING AHEAD OF THE CURVE

I-70 First Tier Purpose and Need 11 of 30

Figure 4: 2005 Average Daily Traffic Volumes

A level of service analysis was completed and shows that relatively severe congestion exists in the I-70 corridor during periods with high commuter traffic. This analysis shows that much of this congestion is likely caused by sub-standard merge, diverge, and weave areas. However, even if these problems were corrected, the corridor is currently operating at or near its basic capacity. In addition to improving the merge, diverge, and weave sections in the corridor, basic capacity enhancements (e.g., lane additions) may be required to address the existing needs. The level of service analysis can be found in **Appendix D**.

It does not appear that traffic conditions in the corridor changed significantly between 2000 and 2005. Peak period volumes have not changed significantly even though the daily traffic volumes are growing as the corridor's population grows and shifts to the east. This is likely due to drivers changing their trip time, destination, and/or route to avoid the over-saturated freeway corridor during the peak periods. If capacity is added to the corridor, peak period traffic volumes are likely to jump as travel times are reduced and drivers adjust their travel decisions to account for the improved conditions. This assumption is consistent with observed conditions on similar freeways elsewhere in the U.S.

Certain specific locations that appear to be major corridor bottlenecks are as described below.

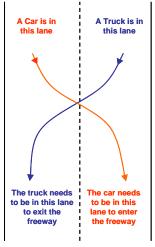
- Downtown Loop The Downtown Loop is congested in the peak hours due to a lane balance issue and tight weaving sections between interchanges. The incoming AM peak is a bottleneck largely because of the congestion from I-670. The outgoing PM peak experiences congestion in the northeast corner of the downtown loop due to a lane drop at Prospect Avenue. There are four incoming lanes from the Loop but only three outgoing lanes east of Prospect Avenue.
- Benton/Jackson Curves These curves have substandard interstate operations and geometrics due to poor sight distance and substantial curves in the roadway. These are areas of higher than average crash rates.

What is Level of Service Analysis?

Level of service (LOS) is a measure by which transportation planners determine the quality of service on roadway. LOS is a measure of traffic density or a measure of congestion. The transportation LOS system uses the letters A through F, with A being best and F being worst.



What is a weaving section?



The car and truck must cross the other traffic to get to the lane they want to be in.

What is lane balance?

A lane balance issue occurs when the number of through lanes on the highway changes through an interchange, usually as a result of a lane drop.

What is a lane drop?

A lane drop is a reduction in the basic number of lanes on the roadway. Lane drops are most common within interchanges in the form of an exit only lane.



I-70 Eastbound at the Jackson Curve

- I-435 I-70/I-435 interchange experiences congestion in the AM peak period in the westbound direction and in the PM peak period in the eastbound direction. This is caused by lane drops through the interchange and steep grades on I-70 leaving the interchange.
- I-470 At the I-70/I-470 interchange congestion tends to occur on I-470 and not on I-70 including tight weaving sections on I-470 north and south of I-70. This congestion affects traffic flow onto and off of I-70.

<u>Measuring Existing Congestion</u>: The Study Team calculated levels of services for basic freeway sections, ramp merges and diverges, and weaving sections based on 2005 traffic data. This analysis allowed the Study Team to identify which sections of the Study Area had the worst congestions. Sections comprised of LOS E or worse were deemed undesirable. The complete analysis is provided in **Appendix D**.

The following locations have capacity and level of service in the undesirable range:

<u>Downtown Loop</u>: The congestion levels through this section, both eastbound and westbound, is either undesirable or approaching undesirable conditions. The levels of service for the basic freeway sections, weaving sections, and ramps are in the range of LOS D and LOS F.

<u>Downtown Loop to Jackson Curve</u>: The traffic congestion through this section, both eastbound and westbound, is currently undesirable. The levels of service for the basic freeway sections, weaving sections, and ramps are predominantly in the range of LOS E and LOS F. Improper lane balance contributes to the capacity problems in this section.

<u>Jackson Curve to I-435</u>: The congestion levels through this section, both eastbound and westbound, is either undesirable or approaching undesirable conditions. The levels of service for the basic freeway sections, weaving sections, and ramps are in the range of LOS D and LOS E.

<u>I-435</u>: The congestion levels in both directions through the I-435 interchange are undesirable, with levels of service predominantly in the range of LOS E and LOS F. Undesirable lane balance through this section is the main constraint to existing capacity.

<u>I-435 to East Project Terminus</u>: The congestion levels through this remaining section of the project corridor are either undesirable or approaching undesirable conditions. The levels of service for the basic freeway sections, weaving sections, and ramps are in the range of LOS C and LOS E.

<u>Congestion and Transit Service</u>: Traffic growth and congestion in the I-70 corridor affect bus services that operate on I-70. Currently, travel options along the I-70 corridor include primarily motor vehicles along with limited transit opportunities. There are currently three fixed bus transit routes that use I-70 between downtown Kansas City and other communities. With the limited options, the majority of travel is done by passenger vehicles. Enhanced modal options in the corridor could have the potential to shift some traffic away from passenger vehicles and thus reduce congestion and environmental impacts such as air quality.

Vehicle occupancy has leveled out based on MARC's 2002 Vehicle Occupancy Study. However, recent increases in fuel costs since that study will impact the current vehicle occupancy use in terms of increased transit ridership and carpooling.

SmartMoves is metropolitan Kansas City's vision for expanded and enhanced public transportation services. It is a regional plan identifying future transit service in seven of the metropolitan area counties. SmartMoves builds on extensive prior transit plans and studies, reflects residents and businesses desires in a public transit system, and incorporates models and best practices from across the country for modern, effective, and efficient public transportation services. The benefits include increased mobility options for residents through new routes and technologies, a strengthened economy as a result of connecting major Kansas City employment and activity centers. The improvements developed for the I-70 FTEIS need to coordinate with the 2008

SmartMoves update and other plans put forward by local and regional agencies.

<u>Regional Congestion Reduction Measures</u>: As the I-70 FTEIS proceeds, coordination with Kansas City Scout and Operation Green Light will be required. These initiatives were implemented to maximize travel efficiency and reduce congestion along I-70 and parallel routes.

The Kansas City Scout, an Intelligent Transportation System (ITS), whose role is to provide traffic and roadway information to motorists in the Kansas City Metropolitan Area. This helps keep the interstate traffic moving smoothly. It functions by using sensors, cameras and large easy to read, changeable message boards to inform motorists about traffic problems, delays, collisions, and other real-time information. Kansas City Scout has the potential to work with all aspects of the region's transportation system.

In 1998, MARC, along with several other agencies in Kansas and Missouri, initiated Operation Green Light, a study of the potential congestion mitigation and air quality impacts of enhanced arterial traffic signal systems to improve coordination of traffic signals on regional traffic corridors. This effort may also establish a link between the operation of regional freeway management systems and the operations of regional signalized arterial roadways. For I-70, this could mean reduced congestion on ramps between the freeway and local arterial roads and greater flow of traffic on parallel roadways. This could reduce congestion at interchanges and reduce the number of local trips on I-70 as local roads move traffic more efficiently.

Restore and Maintain Existing Infrastructure

Other than short reconstructed portions, most sections of the Study Area are approximately 40 to 50 years old. With proper maintenance, the Jackson County I-70 facility has outlasted its original design life of 20 years. Since the original construction, some interstate design standards have been revised and now leave I-70 with undesirable design features. Improvements proposed as part of the I-70 FTEIS need to modernize the freeway.

A variety of data was gathered for the existing corridor's physical characteristics. Four categories were established for the organization and evaluation of this data:

- Cross section elements (lane widths, shoulder widths, medians)
- Alignment (horizontal and vertical)
- Physical condition (pavement and bridge conditions)
- System configuration

The subsequent discussion briefly describes the thresholds established for these categories.

<u>Cross Section:</u> Lane width, shoulder width, and median width were the three primary cross section elements evaluated.

<u>Lane Width</u>: Based on MoDOT standards, the Study Team defined lane widths of less than 12 feet as undesirable. For a freeway such as I-70, 12-foot lanes are important to maximize safety and capacity of the facility.

<u>Shoulder Width</u>: The Study Team defined any shoulder widths of less than ten feet as undesirable. Ten foot shoulders are necessary on both sides of the traveled way to provide room for emergency pull offs, including trucks, given the high truck percentage in the project corridor. Insufficient room for emergency pull offs is detrimental to both the safety and capacity of a roadway, particularly of a freeway as minor crashes or incidents can cause unnecessary lane blockages and substantial congestion.

<u>Median Width</u>: The Study Team defined median widths of less than 26 feet as undesirable. Since ten foot shoulders are required on the inside of the traveled way, and since a median barrier two feet in width is required to separate the opposing directions of traffic, 26 feet is the minimum width of desirable median.

Nearly the entire project length has undesirable shoulder and median widths. The majority of shoulders are less than the standard ten feet in width; the majority of median sections are less than the standard 26 feet in width. Lane widths along I-70 are sufficient. To the extent feasible, Study Area improvements

should attempt to address insufficient shoulder and median widths.

<u>Alignment</u>: The Study Team has evaluated horizontal curvature, vertical curvature, and vertical grades of the existing I-70 alignment and the downtown loop in order to identify undesirable conditions. For clarity, the horizontal and vertical curvature has been described in terms of the speeds that the curves comfortably permit. For example, a curve is described as a 50 mph curve rather than a six degree curve.

Horizontal Curvature: It is not reasonable to quantify every curve below 65 mph as undesirable in this dense, urban corridor. The existing geometry, combined with the dense development along the corridor, are simply too restrictive. Therefore, the Study Team classified curves as undesirable based on location: 50 mph in the downtown loop, 60 mph between the downtown loop and I-435, and 65 mph east of I-435.

<u>Vertical Curvature and Grade</u>: The vertical curvature follows the same categorization as the horizontal curvature. For vertical grades, any grade steeper than four percent was categorized as undesirable.

<u>Locations with Alignment Issues</u>: Geometric characteristics were measured using MoDOT and the American Association of State Highway and Transportation Officials (AASHTO) guidance. There is undesirable geometry at the following locations:

- Downtown Loop Both eastbound and westbound travel directions have undesirable horizontal curves at the I-670 interchange, undesirable horizontal and vertical curves exist with the I-29 interchange, and undesirable vertical curve and sight distance at 12th Street.
- Downtown Loop to Jackson Curve Both eastbound and westbound travel directions have undesirable vertical curvature and sight distance issues slightly east of The Paseo Boulevard, at Brooklyn Avenue, at Chestnut Avenue, at 23rd Street, and at Cleveland

What is a vertical grade?

Vertical grade is the slope of the road. A four percent grade means the road rises or falls four feet for every 100 feet of length.



Westbound I-70 at the Benton Curve

What is a sight distance?

Sight distance is the length of the road ahead that is visible to the driver.

Avenue. There is an undesirable horizontal curve at Benton Boulevard.

- Jackson Curve to I-435 Both eastbound and westbound travel directions have undesirable vertical curvature and sight distance issues through the I-435 interchange and undesirable horizontal curvature at Jackson Avenue. Only the eastbound direction has vertical curvature and sight distance issues at Truman Road and 18th Street.
- I-435 to East Project Terminus does not have vertical curvature, horizontal curvature, or sight distance issues.

<u>Physical Condition</u>: The Study Team recognizes I-70 is an aging facility which requires annual maintenance to the pavement and bridges. The on-going maintenance needs of the pavement and bridges are not a determining factor in evaluating strategy packages. The specific pavement and bridges that are currently in poor condition will require replacement or maintenance work regardless of the strategy package selected by the FTEIS process. The I-70 FTEIS needs to seek solutions that modernize the freeway and reduce the need for the frequent regular maintenance that is needed today.

<u>System Configuration</u>: The Study Team conducted a system configuration evaluation based on AASHTO Principles of Good Urban Freeway Planning and Design. The following are key system configuration principles that Study Area improvements need to address where feasible:

- Maintain route continuity and maintain basic number of lanes.
- Provide lane balance and continuity.
- Maintain appropriate ramp spacing and design ramps consistent with freeway speeds.
- Eliminate weaving within interchanges along the mainline.

The Study Area locations that do not fully meet these AASHTO principles are listed below.

<u>Interchange Access Issues</u>: A number of interchanges in the project corridor do not provide full access to all directions of traffic.

- MO-9 interchange prohibits northbound traffic from going east or west on I-70.
- I-670 interchange prohibits westbound traffic on I-70 from going southbound.
- Brooklyn Avenue, Prospect Avenue, Chestnut Avenue, Benton Boulevard, Truman Road, and 18th Street all provide only partial access; the configurations can be confusing and counter intuitive to driver expectations.
- Access at 27th Street and Jackson Avenue is partial and asymmetrical.
- U.S. 40 interchange (between Manchester Trafficway and I-435) prohibits southbound to eastbound and northbound to westbound access.
- There is only an eastbound exit ramp at Sterling Avenue.
- There is only an eastbound entrance ramp at Blue Ridge Boulevard.

<u>Improper Lane Balance</u>: Improper lane balance contributes to the congestion problems in the corridor. The following areas represent bottleneck situations, creating significant congestion due to improper lane balance.

- Westbound I-70 at Broadway Boulevard.
- Westbound I-70 through the I-670 interchange.
- Eastbound I-70 approaching The Paseo Boulevard.

What is partial access?

Partial access is when one or more movements at an intersection or interchange are not allowed or unavailable. For example, the U.S. 40 W interchange prohibits southbound U. S. 40 W traffic to access eastbound I-70.

- Eastbound I-70 at Prospect Avenue.
- Eastbound and westbound I-70 through the I-435 interchange.

<u>Downtown Loop</u>: This section of the corridor is characterized by short weaving sections, and short on and off ramp lengths.

- Eastbound I-70 has a number of undesirable weave lengths within the downtown loop. The weave length issues are between Broadway Boulevard and Main Street, on frontage road beneath Main Street, between Main Street and MO-9, between Admiral Boulevard and 11th Street, and between 10th Street and I-670 interchange. Shorter than desirable eastbound ramps include to and from the frontage road along north leg of loop (6th Street) and the eastbound entrance ramp from 10th Street. Finally, the east leg of the loop has a left lane exit to eastbound I-70 in the I-670 interchange.
- Westbound I-70 has a number of undesirable weave lengths within the downtown loop. The I-70 weave length issues are Broadway Boulevard and I-35, Main Street and Wyandotte Street, MO-9 and Main Street, 11th Street and Independence Avenue, and on the MO-9 exit ramps. Westbound ramp length issues include to and from the frontage road along north leg of the downtown loop (Independence Avenue). Westbound I-70 has undesirable spacing between the exits at Independence Avenue and between the entrances at 11th Street.
- The downtown loop's west leg also has undesirable weave lengths between I-70 and 12th Street in both directions as well as between 12th Street and access to/from the south leg of the downtown loop. Ramp length issues exist on the 13th Street ramp to southbound I-35.
- The south leg of the downtown loop has a short weave area between the eastbound Truman Road on-ramp and the interchange ramps in the southeast corner of the downtown loop.



North side of downtown loop looking east



North side of downtown loop looking west

Downtown Loop to Jackson Curve: This section is characterized by short weaving sections, short ramp lengths, and undesirable lane balance. There are undesirable weaving sections between The Paseo Boulevard and Brooklyn Avenue, as well as between 18th Street and 23rd Street in both directions. Undesirable eastbound exit ramp lengths and westbound entrance ramp lengths occur at The Paseo Boulevard, Brooklyn Avenue, Indiana Avenue, and 27th Street. Eastbound 23rd Street has undesirable entrance and exit ramp lengths.

<u>Jackson Curve to I-435</u>: This section has short weaving sections, short ramp lengths, and undesirable lane balance. Both the eastbound and the westbound directions have undesirable weaving sections between Manchester Trafficway and I-435. The eastbound entrance ramp and the westbound exit ramp lengths at Van Brunt Boulevard are both undesirable.

<u>I-435 to East Project Terminus</u>: This section has short weaving sections, short ramp lengths, and undesirable lane balance. I-70 has undesirable eastbound exit ramp length and westbound entrance ramp length at Blue Ridge Cut-Off. Both directions of I-70 have undesirable entrance ramp lengths at Blue Ridge Boulevard. An undesirable weaving area exists at the westbound I-70 exit ramp at U.S. 40. Lee's Summit Road has all four ramps with undesirable lengths. The weaving areas within the I-470 interchange are undesirable in both directions.

Improve Accessibility

Often major linear features such as rivers and transportation corridors act as barriers to pedestrians, bicyclists, and those without motor vehicles. The I-70 FTEIS will work to improve connections across I-70 and the downtown loop and reduce the barriers to non-motorized travelers.

<u>Crossing I-70</u>: The Study Area has a number of bridges and underpasses crossing the freeway which provide opportunities for enhancement. Some I-70 bridges and underpasses are connected to interchanges while others only provide access across the freeway. In either case, it is important to provide facilities for the pedestrian. To



Pedestrian bridge east of Van Brunt Boulevard

supplement the numerous roadway crossings of I-70, there are two pedestrian bridges – one east of the Van Brunt Boulevard interchange connecting at Oakley Avenue and the second east of the Jackson Avenue interchange connecting at Cypress Avenue. The Cypress Avenue pedestrian bridge connects Cypress Park on the south side of I-70 to the residential neighborhood to the north of I-70.

The majority of the bridges and underpasses have sidewalk accommodations on at least one side of the street. However, there are six locations without sidewalks available. These cross streets are Blue Ridge Boulevard, U.S. 40 East, Sterling Avenue, Stadium Drive, Manchester Trafficway, and U.S. 40 West. Pittman Road has a sidewalk on the bridge over I-70, however there are no connecting sidewalks on either side of the bridge. Inside the downtown loop, there are two additional I-70 crossings without sidewalk facilities located at 6th Street and Oak Street.

<u>Bicycle Facilities</u>: The Kansas City Area does not yet have a regional network of fully interconnected bicycle facilities. There are various bike lanes and paths available throughout the Study Area, but non-motorized transportation system improvements, along the I-70 corridor or paralleling the corridor, are still needed. Individual projects have been constructed to various standards, some of which offer potential for future inclusion as part of a comprehensive regional bikeway system. Since most of the existing projects were planned and designed as recreational trails, they primarily meet recreation needs and may need to be upgraded or extended to become effective transportation routes.

<u>Transit Routes</u>: KCATA fixed routes that parallel or cross I-70 use the arterial road network. More than 55 KCATA transit routes cross I-70 or the downtown interstate loop as they provide radial service from the transit center in downtown Kansas City.

In addition, 8.35 percent of the households in adjacent census block groups to I-70 have no vehicles available. Ten of the 61 census blocks groups adjacent to I-70 have 20 percent or more of their households with no vehicle. This indicates that transit needs are an important aspect of the I-70 corridor.

Improvement of accessibility across I-70 and for pedestrians, bicyclists, and those without motor vehicles, is needed to serve and support the wide variety of land uses adjacent to the freeway. The land uses within the Study Area vary drastically from Kansas City's Central Business District to residential neighborhoods to major regional retail areas. Even within individual land use categories the Study Area varies greatly. For example, residential land uses include suburban neighborhoods, urban neighborhoods, and downtown neighborhoods.

Together with a diverse land use, the Study Area contains several schools, churches, parks, and recreational areas such as Parade Park, West Terrace Park, and Little Blue Trace Nature Preserve. Several noteworthy buildings or structures adjacent to the corridor include Kauffman and Arrowhead Stadiums, Independence Center Shopping Mall, Kansas City Star Building, H&R Block World Headquarters, Whittaker Federal Courthouse, Bartle Hall Convention Center, Sprint Center, and a Federal Bureau of Investigation Building. It is important that improvements are sensitive to the needs of the local neighborhoods and businesses to access these key destinations located on either side of the freeway.

Improve Goods Movement

Kansas City's mid-continent location makes the region a key location for the movement of goods. National cargo passes through the region by truck, rail, water, and air. I-70, I-35, I-29, and U.S. 71 are the primary truck routes in the region. Shipments of local goods often use the interstate system to distribute goods from the manufacturer to the warehouse or from the warehouse to the store. The I-70 FTEIS improvements need to support goods movement by providing less congested, more reliable travel. This will lead to improved freight travel times and reduced operating costs for moving goods.

Trucks are an important component of the traffic stream in the I-70 corridor. Approximately 11 percent of the vehicles in the corridor are trucks. Truck percentages during the peak periods (7:00 a.m. - 9:00 a.m. and 4:00 p.m. - 6:00 p.m.) are higher

towards the eastern parts of the study area due to the increase in commuter traffic towards downtown.

Table 2: Truck Percentages on I-70

		AM	PM	Daily
Eastbound I-70	Downtown Loop to I-435	9%	4%	11%
	I-435 to I-470	10%	4%	11%
Westbound I-70	I-470 to I-435	4%	9%	11%
	I-435 to Downtown Loop	3%	8%	11%

Trucks impact the freeway operations in two significant ways. First, truck operations impact traffic flow. While the percentage of trucks on I-70 is relatively low in the peak direction during the peak periods, (three to four percent of the overall traffic flow) it has been observed that the mixture of slow traffic and grades on the corridor often causes trucks to accelerate slowly, impeding traffic flow. Secondly, the major truck generators throughout the corridor have a significant impact on the operations of some of the corridor's interchanges.

Table 3: Major truck traffic generators near the Study Area-Year 2000

General Location	Number of Daily Trips*
Kansas City, Front Street west of I-435	2,177
Kansas City, Bannister Road Federal Complex	1,728
Kansas City, West Bottoms/UPS	1,446
Kansas City, Front Street east of I-29/35	1,272
Kansas City, Crown Center	1,243
* Daily vehicle-trips by light-duty and heavy-duty trucks	_

As described in the MIS, the largest generators of truck traffic in the study are the Kohl's distribution center at Adams Dairy Parkway, the Lake Ammunition Plant, the Lipton Tea factory on Noland Road, and the major retail centers at I-470 and I-70. Improvements to I-70 will need to be coordinated with the I-70 Supplemental EIS which is evaluating truck only lanes for I-70 across the State.

What is the Relationship of the I-70 FTEIS to Other Regional Transportation Studies?

The FTEIS will also incorporate the results of other transportation-related studies prepared under MoDOT and MARC guidance. This provides coordination at the regional level so that the I-70 FTEIS in KC Metro is completed with awareness of other regional initiatives. Relevant regional studies are discussed below.

Statewide I-70 First Tier Environmental Impact Statement

In January 2000, MoDOT initiated the I-70 First Tier EIS to determine the best transportation improvement strategy for the I-70 Study Corridor between the I-470 interchange in the Kansas City Metropolitan Area and the Lake St. Louis interchange in the St. Louis Metropolitan Area. The Final First Tier EIS was approved in November 2001 and the Record of Decision was executed in December 2001.

Through a coordinated public and agency involvement process, the Widen Existing I-70 Strategy was identified as the preferred strategy. In general, this strategy entails a reinvestment in existing I-70. This strategy will reconstruct the existing I-70 pavement, bridges, and interchanges across the state with an improved and widened six-lane roadway section. Between I-470 and Oak Grove, this strategy will consist of a widened six lanes be provided in the rural areas and a minimum of eight lanes through the metropolitan area of Kansas City.

I-70 SIU #1 Environmental Assessment (EA)

The Second Tier I-70 SIU #1 EA builds from the work completed in the I-70 First Tier EIS. The minimum eight-lane section on the east side of metropolitan Kansas City would extend from I-470 in Independence to Adams Dairy Parkway in Blue Springs. Considerations would need to be given to connection with and continuation of these lanes through the I-470 interchange to the west as part of the I-70 FTEIS. Environmental clearance was achieved for the portion of I-70 east of I-470. The SIU #1 EA resulted in a Finding of No

What is a Record of Decision?

Record of Decision (ROD) is a public document formalizing the final course of action to be taken by the Lead Agency at the end of an Environmental Impact Statement Study. The ROD discusses all environmental alternatives or strategies considered in the EIS process, provides the rationale for the alternative or strategies selected, and explains why the other alternatives or strategies were not chosen.

Significant Impacts (FONSI) which was signed on September 2006.

Supplemental Statewide I-70 First Tier Environmental Impact Statement

The Statewide I-70 EIS was re-opened to examine truck only lanes (TOL) potential on I-70 across the state. The concept is that trucks would have separate exclusive use lanes providing increased capacity for freight movements while reducing conflicts between cars and trucks. This effort was initiated in late 2007. Close coordination between the Supplemental I-70 FTEIS and the I-70 FTEIS in KC Metro will be important as both studies proceed.

I-435/I-70 Alternative Study

I-435/I-70 Alternative Study evaluated interchange options to improve traffic flow through the I-435 and I-70 interchange. The I-70 FTEIS must consider the recommended interchange concept and incorporate it to the extent that the interchange concept is compatible with other I-70 improvements indentified through the FTEIS.

Northland/Downtown Major Investment Study (MIS)

The Northland/Downtown Major Investment Study was completed in 2002 to address and improve the transportation and economic linkages across the Missouri River between downtown Kansas City, MO, the Northland, and the Kansas City International (KCI) Airport. Sponsored jointly by the KCATA, MoDOT, MARC, and the city of Kansas City, MO, this study considered a number of alternative improvement strategies to address bridge capacity issues into and out of downtown. The I-29 corridor serves trips that are destined to or are just passing through downtown and connects with the downtown loop. Improvements to the downtown loop will benefit all highway corridors that connect with it.

Full build-out of the recommended long-term improvements proposed in the Northland/Downtown MIS would entail completion of fixed-guideway transit service between downtown and Kansas City International Airport. The I-29



Paseo Bridge

corridor would be generally upgraded and widened to an eight-lane section from U.S. 169 into downtown, including the construction of a new Paseo Bridge over the Missouri River. Construction of this new bridge has begun as part of the kcICON project. Complementary improvements and upgrades of the various access points along I-29, including improved direct access into the northeast corner of downtown, would be provided.

I-29/I-35 EIS and Location Study

The I-29/I-35 EIS and Location Study completed in 2007 was a result of the Northland/Downtown MIS findings and recommendations for bridge improvements to the I-29 corridor. The study resulted in the kcICON signature bridge (Christopher S. Bond Bridge) to replace the Paseo Bridge. Construction began in May 2008. The key element, as it relates to the I-70 FTEIS, is the environmental clearance of improvements to the northeast portion of the downtown loop that should be integrated with the I-70 FTEIS.

Downtown Loop Master Plan

The Downtown Loop Master Plan was developed as part of the I-29/I-35 EIS in early 2005. The goal was to lay out a long-term conceptual improvement plan for the freeway and ramp system that comprise the downtown loop. The concept includes improvements that are warranted to improve the overall safety and efficiency of the loop's operation, while supporting downtown Kansas City's land use and development goals. With this approach, improvements to the corridors that feed into the downtown loop can be implemented in a manner consistent with the overall master plan.

The development of the Downtown Loop Master Plan balanced the travel desires of both commuters who access downtown and the regional travelers passing through. The development and assessment of the Downtown Loop Master Plan considered travel markets passing through, traffic demand on approach corridors, freeway lane continuity and balance, and the need for access points to downtown. The result of the study effort was a conceptual plan for freeway

through lanes, ingress and egress ramps, associated auxiliary lanes, and local roadway modifications.

I-470 Purpose and Need Study

MoDOT is conducting the I-470 Purpose and Need Study as one of the first steps to gather detailed information on improvement needs along I-470. The area being examined is the stretch of I-470 from Blue Ridge Boulevard on the western end to 39th Street on the eastern end in Jackson County.

This study will not propose solutions rather result in an analysis on the information gathered to create a Purpose and Need Statement. The Purpose and Need Statement will identify transportation issues in terms of underlying root causes that may need to be addressed, such as safety, mobility and access to recreation, employment opportunities and commerce. These issues will be prioritized into short-term and long-term needs for future transportation studies and improvements.

I-70 Corridor Transit Alternatives Analysis

The I-70 Corridor Transit Alternatives Analysis was completed in 2007 as a supplement to the I-70 Major Investment Study to provide additional detail for transit alternatives in the I-70 corridor. This study includes analysis of a Transportation Systems Management (TSM) Alternative, an Express Bus Alternative, and a Commuter Rail Alternative. The final recommendations are an enhanced express bus service should be viewed as a near-term transit strategy while commuter rail along existing rail lines should be viewed as a longer term proposition.

Summary

The purpose of the I-70 FTEIS is to determine an improvement strategy for the corridor, including future capacity and mode choices, that addresses the key needs outlined in this document. These five key purpose and need goals are:

- Improve Safety
- Reduce Congestion

- Restore and Maintain Existing Infrastructure
- Improve Accessibility
- Improve Goods Movement

The Study Team will develop, refine, and evaluate potential I-70 corridor strategies based on the needs outlined in this document while seeking to minimize impacts to the human and natural environment.

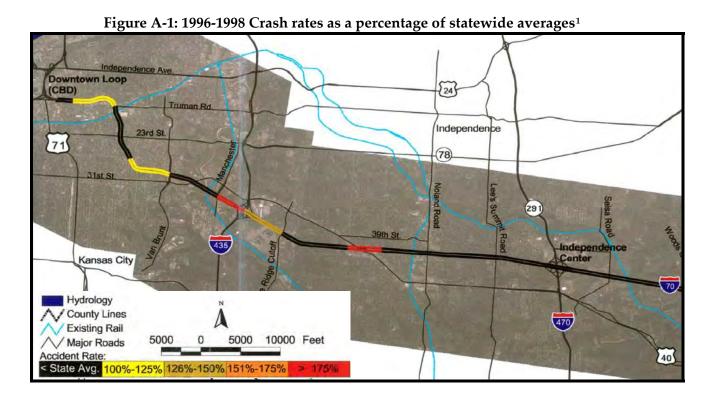
APPENDIX A

Crash History

I-70 Crash History

Major Investment Study (MIS) Crash Summary

A crash analysis was performed as part of the I-70 Major Investment Study (MIS) for the period 1996-1998 in which the average annual number of crashes and the average crash rate for each segment of I-70 between interchanges was computed. Eight segments were identified to have a crash rate that exceeded the statewide crash rate of 122.77 crashes per hundred million vehicle miles of travel. Approximately 574 crashes were reported in the Study Area during that time period. Approximately 24 percent of the crashes involved personal injury and approximately one percent involved fatalities. The frequency of crashes was more than twice that of the statewide average at I-70 between Manchester Road and I-435 and at I-70 between U.S. 40 and Blue Ridge Boulevard. **Figure A-1** shows the high crash locations explored in the MIS in relation to the statewide average crash rate.



2003-2007 Crash Analysis

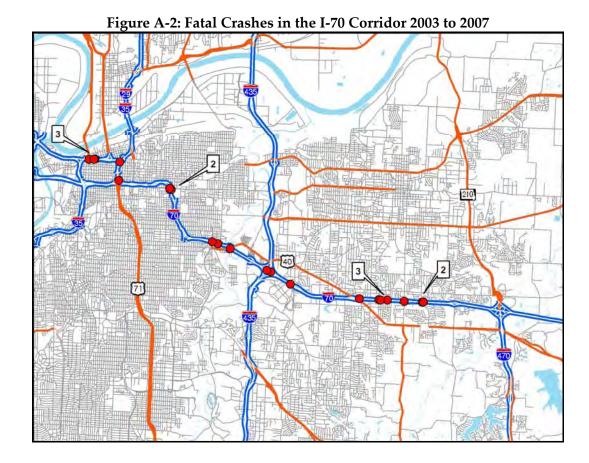
A total of 5,857 crashes were reported within the Study Area I-70 corridor between 2003 and 2007. The locations of the fatal crashes are shown in **Figure A-2**. For the purposes of our

¹ I-70 MIS Jackson County, Technical Memorandum 1, "Problem Definition and Initial Statement of Purpose and Need", Section 5, Page 46, Figure 5.6 (m)

analysis, the study corridor was divided into 14 segments. A summary of the crash rates analysis is shown in **Table A-1**. The crash rates that fall within above 151 percent of the statewide average crash rate are undesirable.

The dominant crash type for the analysis period was rear end (approximately 53 percent) followed by passing and out of control (approximately 18 percent each). Rear end collisions often occur in congested areas as drivers fail to stop for slow moving traffic.

Approximately 78 percent of the crashes in the period of 2003 to 2007 resulted in only property damage and approximately 22 percent resulted in injury. A total of 20 crashes (less than one percent) resulted in fatalities. Injury and fatal crashes were spread throughout the corridor. Approximately 23 percent of all crashes occur in dark conditions and approximately 19 percent occur in icy/snow/wet pavement conditions. Approximately 30 percent occur during the weekday peak period of traffic (7-9 a.m. and 4-6 p.m.), which has the largest effect on delay for motorists. The locations of those fatal crashes are shown in **Figure A-2**.



The locations with the highest crash rates between 2003 and 2007 are the downtown loop, westbound from the Benton curve to the downtown loop, eastbound from the Jackson curve to I-435 and the I-435 interchange. The locations that were identified in the MIS to have the highest

crash rates between 1996 and 1998 were between Manchester Trafficway and Blue Ridge Cut-Off and in the vicinity of the U.S. 40 interchange. The Benton-Jackson curves were also identified to have high crash rates. The part of I-70 where crash rates increased significantly during the period from 2003 to 2007 compared to the period from 1996 to 1998 is the Benton-Jackson curves (approximately 25 percent higher). The crash rates at the Blue Ridge Cut-Off and U.S. 40 East interchanges showed significant reductions. The 1996 to 1998 crash rate was reported as 380.83 crashes per 100 million vehicle miles of travel.

Table A-1: Summary of Crash Analysis for the Period 2003-2007

			2003 to 2007 Crash Rate		5 Year Crash Rate versus	
			(Crashes Per 100 Million		Statewide Average	
			Vehicle Miles of Travel)		Crash Rate* (107.82)	
Analysis Sections		(miles)	Eastbound	Westbound	Eastbound	Westbound
1	Downtown Loop	3.45	340	0.50	31	6%
2	Paseo Interchange	0.86	161.41	227.10	150%	211%
3	Benton Curve	1.20	154.84	211.11	144%	196%
4	23rd Street Interchange	0.67	93.76	61.35	87%	57%
5	Jackson Curve	0.88	234.57	90.07	218%	84%
6	Van Brunt Interchange	0.73	238.13	128.44	221%	119%
7	U.S. 40 West Interchange	0.59	186.80	98.21	173%	91%
8	Manchester Interchange	0.57	211.48	114.95	196%	107%
9	I-435 Interchange	0.96	189.01	213.37	175%	198%
10	Blue Ridge Cut-Off Interchange	1.28	136.12	149.12	126%	138%
11	U.S. 40 East Interchange	1.60	141.61	114.05	131%	106%
12	Noland Road Interchange	1.50	140.11	132.24	130%	123%
13	Lee's Summit Road Interchange	1.35	113.50	106.52	105%	99%
14	I-470 Interchange	1.51	131.95	111.28	122%	103%
* Statewide average crash rate for urban interstates						

^{*} Statewide average crash rate for urban interstates.

The downtown loop, the I-435 interchange, and an additional four sections eastbound and two sections westbound are defined as undesirable because the crash rate exceeds 150 percent of the statewide average rate of 107.82 crashes per 100 million vehicle miles of travel.

Shading indicates sections which exceed the statewide average crash rates by more than 150 percent.

APPENDIX B

Demographic Trends

Demographic Trends

Transportation is generally a derived demand. That is – transportation is usually a means to some other end rather than being an end into itself. That being the case, transportation demand is largely derived from the demographic characteristics of the local and regional environments. It is critically important to understand these characteristics in the study of transportation systems to ensure that the systems are built to best address the local needs. This study used several existing sources of data to put together a composite demographic profile of the Study Area. The sources of data used are shown below:

Demographic Data Sources

- I-70 Major Investment Study
 - ➤ Historical (1990-2000) population growth in Study Area
 - ➤ Projected (2000-2020) population growth in Study Area
 - ➤ Major trip generators/attractors
- Mid-America Regional Council 2030 Long Range Transportation Plan
 - ➤ Historical population and employment for region and by county
 - Future population and employment for region and by county
 - ➤ Historical and future population and employment growth by census tract
 - Travel times
 - ➤ Future capacity deficiencies
 - Transit, bike, pedestrian, railroad, truck
- Mid-America Regional Council Emme2 Models
 - Existing and future land use by traffic analysis zone (TAZ)
 - Future link daily and peak hour volumes, level of service, travel times
 - Origin-Destination information
- 2000 Census Transportation Planning Package Data
 - ➤ 2000 household and employment data by census tract and TAZ
 - 2000 Home-Work flow information (Origin-Destination, travel time)

Regional Population Trends

Population growth is one of the clearest indicators of economic activity in a corridor or region. Understanding the dynamics of population shifts within regions can help to set priorities for transportation improvements. Kansas City region has experienced a 28 percent growth in

population between 1970 and 2000, and according to Mid America Regional Council's forecasts, the region is expected to grow by 31 percent by 2030, which reflects a moderate and steady growth for the region. **Figure B-1** shows the historic and forecasted population trends in the region between 1970 and 2030.

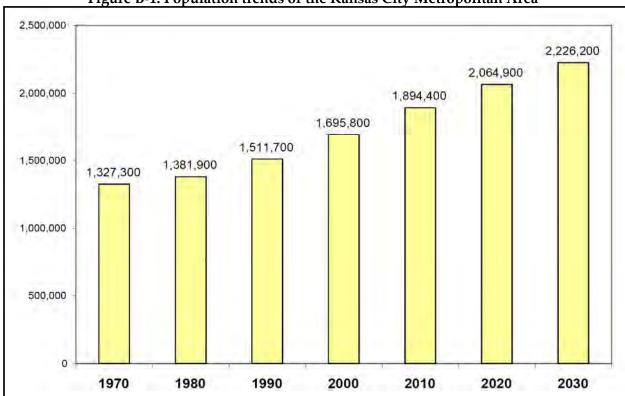


Figure B-1: Population trends of the Kansas City Metropolitan Area¹

As with most urban areas in the U.S., during the past several decades the Kansas City region's population has spread out over a larger area as the population has grown. One of the areas where much of this growth has occurred is in Johnson County, Kansas. While some of this geographic spreading has occurred to accommodate population growth, much of it has occurred as a result of smaller household sizes and smaller residential household densities. The population trends are shown in **Figures B-2** through **B-5**. The most critical conclusion from this data is that the region is decentralizing; although it is occupying more land, it is also thinning out.

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¹ "Transportation Outlook 2030", Mid American Regional Council (MARC) Long Range Plan, Page 6, Figure 2-1

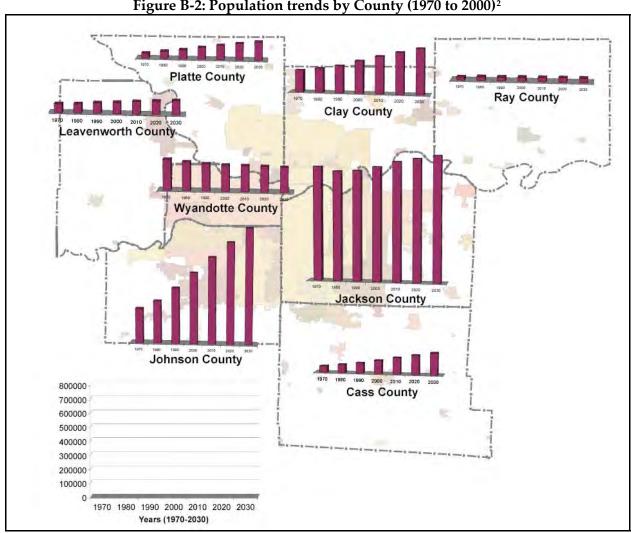


Figure B-2: Population trends by County (1970 to 2000)²

² "Transportation Outlook 2030", Mid American Regional Council (MARC) Long Range Plan, Page 7, Figure 2-2

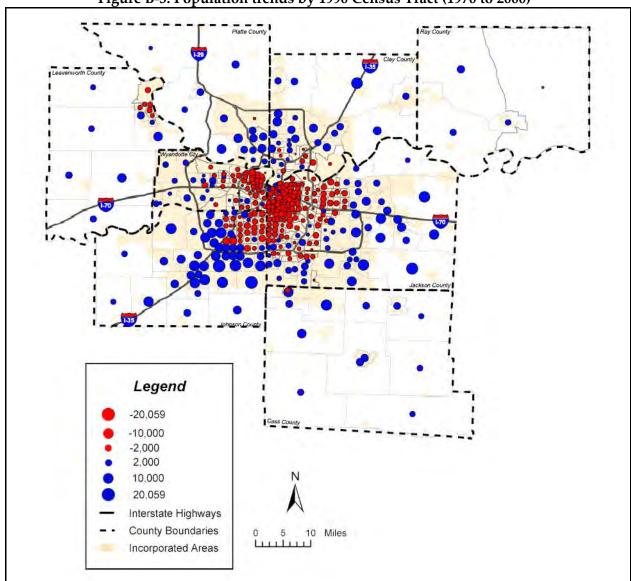


Figure B-3: Population trends by 1990 Census Tract (1970 to 2000)³

³ "Transportation Outlook 2030", Mid American Regional Council (MARC) Long Range Plan, Page 8, Figure 2-3

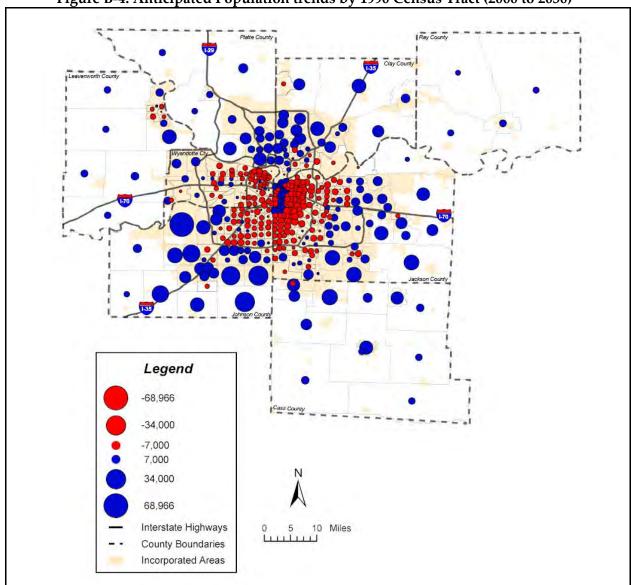
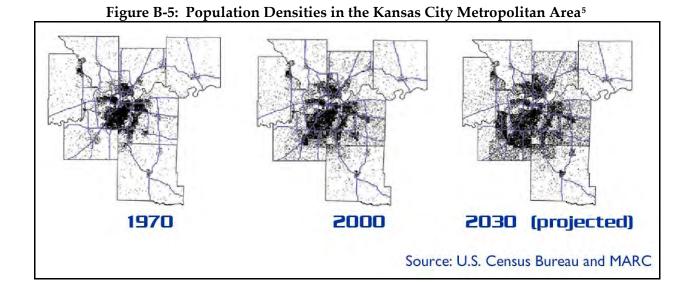


Figure B-4: Anticipated Population trends by 1990 Census Tract (2000 to 2030)⁴

⁴ "Transportation Outlook 2030", Mid American Regional Council (MARC) Long Range Plan, Page 9, Figure 2-4



Regional Employment Trends

Also following national trends for urban areas, the Kansas City region has experienced a high employment growth between 1970 and 2000 (82 percent). This trend is expected to continue into the future, with an employment increase of 52 percent anticipated. The Kansas City area is the home to the headquarters of several businesses such as Hallmark Cards, US Sprint, Russell Stover Candies, H & R Block, AMC Theatres, etc. **Figure B-6** shows the employment trend of the region between 1970 and 2030.

 $^{^{\}scriptscriptstyle 5}$ "Transportation Outlook 2030", Mid American Regional Council (MARC) Long Range Plan, Page 10, Figure 2-5

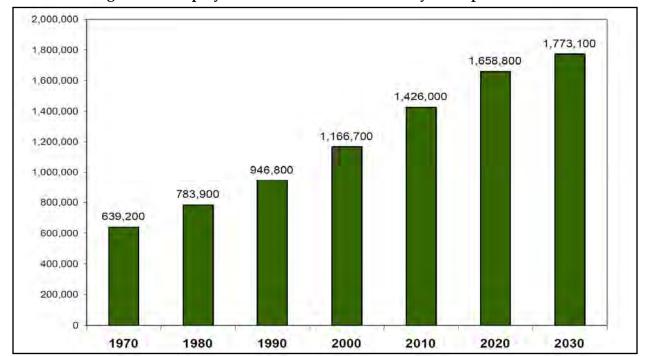


Figure B-6: Employment trends of the Kansas City metropolitan area⁶

As with employment, the greatest employment increase in the region between 1970 and 2000 occurred in Johnson County, Kansas, which is also expected to experience the highest increases in the region between 2000 and 2030. The employment trends by county are shown in **Figures B-7** through **B-9**.

^{6 &}quot;Transportation Outlook 2030", Mid American Regional Council (MARC) Long Range Plan, Page 11, Figure 2-7

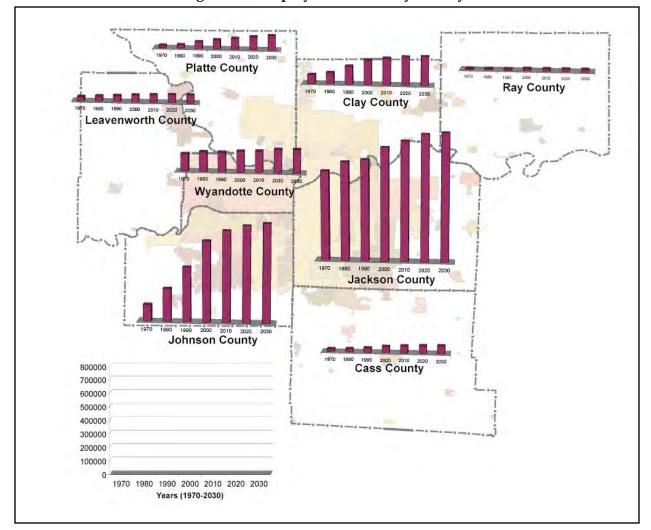


Figure B-7: Employment trends by County⁷

⁷ "Transportation Outlook 2030", Mid American Regional Council (MARC) Long Range Plan, Page 12, Figure 2-8

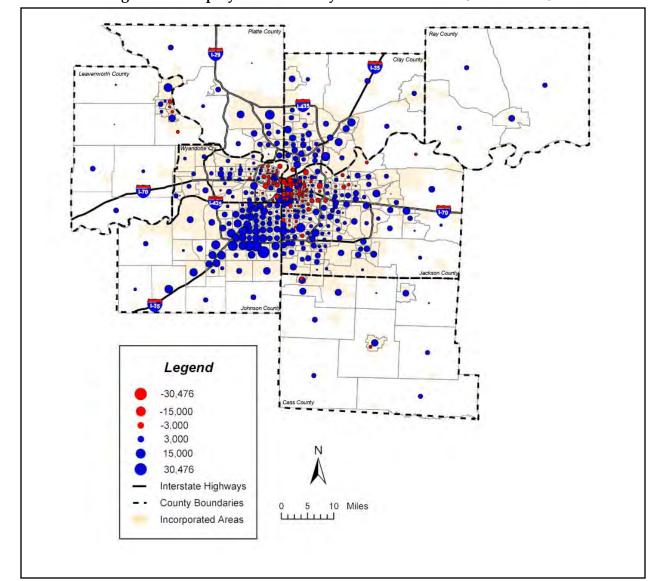


Figure B-8: Employment trends by 1990 Census Tract (1970 to 2000) 8

⁸ "Transportation Outlook 2030", Mid American Regional Council (MARC) Long Range Plan, Page 13, Figure 2-9

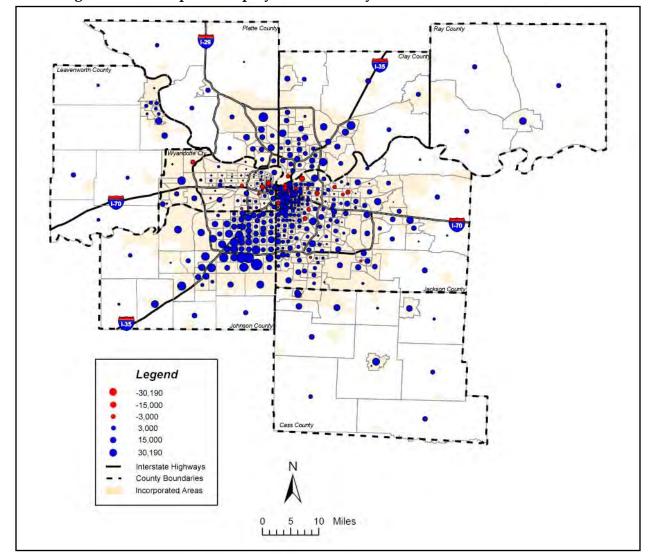


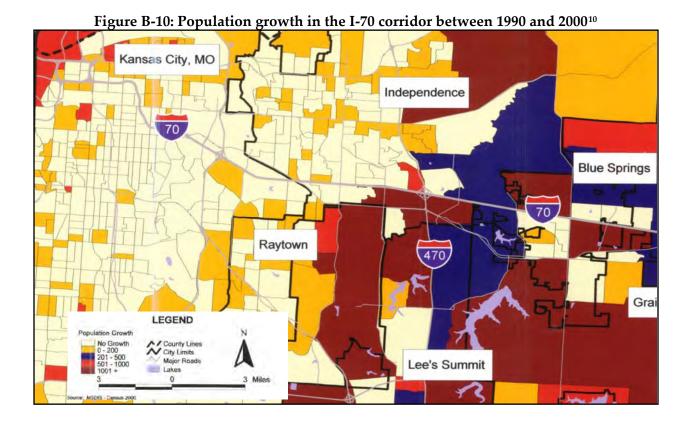
Figure B-9: Anticipated Employment trends by 1990 Census Tract (2000 to 2030)9

Corridor Population Trends

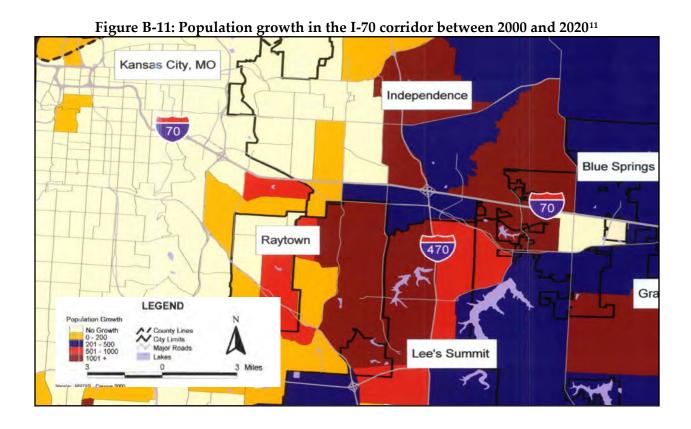
Within the study corridor I-70 lies in Jackson County between downtown Kansas City and Independence. Jackson County has experienced a slight population decline between 1970 and 1990 but has experienced a 3.5 percent growth in population between 1990 and 2000 and is anticipated to grow by approximately nine percent between 2000 and 2030. Recent population growth in the corridor has been focused in communities on the eastern edge of the Study Area such as Blue Springs and Independence. Employment in Jackson County has grown by 22 percent between 1970 and 2000 and is anticipated to increase by approximately 33 percent between 2000 and 2030. **Figures B-10** and **B-11**, which show the recent and forecasted

⁹ "Transportation Outlook 2030", Mid American Regional Council (MARC) Long Range Plan, Page 14, Figure 2-10

population growth in the Study Area corridor, verify that the people and jobs continue to move eastward along I-70 in the Study Area.



 $^{^{10}}$ I-70 MIS Jackson County, Technical Memorandum 1, "Problem Definition and Initial Statement of Purpose and Need", Section 3, Page 7, Figure 3.3 (a)



 $^{^{11}}$ I-70 MIS Jackson County, Technical Memorandum 1, "Problem Definition and Initial Statement of Purpose and Need", Section 3, Page 8, Figure 3.3 (b)

APPENDIX C

Trip Generators and Attractions

Trip Generators and Attractions

The I-70 Major Investment Study (MIS) carried out an extensive inventory of trip generators and attractions along the study corridor. An understanding of these characteristics can help to more fully understand travel needs along the corridor, as well as assist locating critical system components, such as freeway interchanges and transit stops. A description of the findings detailed in the MIS is provided in the following section.

The MIS reported that the residential centers are generally in the middle to outer portions of the Study Area including Independence, Blue Springs, Lee's Summit, and the Country Club Plaza. **Table C-1** identifies the general locations of the major trip origins according to MARC's regional travel demand model.

Table C-1: Trips Generated from Major Trip
Origin Centers in the Study Area ¹

Number of Daily				
General Location	Trips ¹			
Work Trips ²				
Lee's Summit, near US 50	7,484			
Blue Springs, US 40 and M-7	5,916			
Kansas City, southwest of Raytown	5,863			
Blue Springs, north of I-70	5,312			
Lee's Summit, near US 50	5,094			
Blue Springs, US 40 and M-7	4,684			
Independence, US 24 and M-291	4,674			
Kansas City, south of Country Club Plaza	4,611			
Non-Work Trips ³				
Kansas City, south of Country Club Plaza	30,940			
Lee's Summit, near US 50	29,140			
Lee's Summit, near US 50	26,062			
Kansas City, Country Club Plaza area	25,631			
Kansas City, Country Club Plaza area	24,957			

Daily person-trip productions

Source: Cambridge Systematics, Inc.; estimated from MARC travel demand model.

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Includes the home-base work trip purpose

³ Includes home-based shopping, home-based social/recreational, home-based other, and non-home-based trip purposes.

 $^{^1}$ I-70 MIS Jackson County, Technical Memorandum 1, "Problem Definition and Initial Statement of Purpose and Need", Section 5, Page 32, Table 5.6 (d)

The MIS also reported that the major employment centers are generally located between downtown Kansas City and the Country Club Plaza and near Ward Parkway and Bannister Road whereas the major shopping areas are located near Lee's Summit, Blue Ridge Crossing, and the Country Club Plaza. Other major trip attractors (e.g., entertainment centers) are the Country Club Plaza, the Jackson County Sports Complex near I-435, and near the Independence Shopping Center at I-470. These locations are shown in **Table C-2**.

Table C-2: Trips Attracted to Major Study Area Employment, Shopping, and Entertainment Centers ²

General Location	Number of Daily Trips ¹			
Work Trips ²				
Kansas City, south, near Bannister Road	13,444			
Kansas City Downtown, just south of Downtown Loop	11,252			
Kansas City, southwest of Raytown	9,550			
Kansas City, southeast of Downtown Loop	9,378			
Kansas City, south, near Bannister Road	7,877			
Kansas City, Main Street south of 22nd Street	7,361			
Kansas City Downtown, just south of Downtown Loop	7,020			
Kansas City, I-435 near Riverfront Park	6,881			
Kansas City, Country Club Plaza area	6,709			
Kansas City, Southwest Trafficway near I-35	6,500			
Shopping Trips ³				
Kansas City, near I-435, southeast of Raytown	12,576			
Kansas City, Country Club Plaza area	9,828			
Independence, US 40/I-70: major retail center	9,479			
Kansas City, Country Club Plaza area	8,979			
Lee's Summit, near US 50	8,320			
Other Trips ⁴				
Kansas City, Country Club Plaza area	45,561			
Kansas City, Country Club Plaza area	45,479			
Kansas City, south of Country Club Plaza	44,922			
Independence, M-291/I-70: major retail center	37,332			
Kansas City, south, near Bannister Rd.	35,937			
Kansas City Downtown, just south of Downtown Loop	35,604			

¹ Daily person-trip attractions

Source: Cambridge Systematics, Inc.; estimated from MARC travel demand model.

Includes the home-base work trip purpose

³ Includes the home-based shopping trip purpose

Includes home-based social/recreational, home-based other, and non-home-based trip purposes.

² I-70 MIS Jackson County, Technical Memorandum 1, "Problem Definition and Initial Statement of Purpose and Need", Section 5, Page 35, Table 5.6 (e)

It should be noted that the data provided above and in the MIS was based on 2000 census data, as is MARC's current validated existing conditions regional travel demand model. However, the study corridor has obviously changed since the 2000 census. The I-470 and I-70 interchange has experienced an increase in regional retail opportunities with the Eastland Business Park and the Bass Pro Shop. The Blue Ridge Mall redevelopment has Blue Ridge Crossing which includes Walmart Super Center, Lowe's, and additional pad site retail. The Bannister Mall has since closed. The Sprint Center has also opened since 2000.

Furthermore, it needs to be mentioned that the Jackson County Sports Complex is in the Study Area (in the southeast quadrant of the I-70/I-435 interchange) and is a major trip attractor during special events. The Sports Complex includes Arrowhead Stadium (Kansas City Chiefs) and Kauffman Stadium (Kansas City Royals). The roadways that serve these stadiums must take the stadiums into account while improvement strategies are being developed.

APPENDIX D

Traffic Data and Level of Service Analysis

I-70 Traffic Data and Level of Service Analysis

Traffic volumes are the manifestation of a corridor's demographic and transportation system characteristics. As such, this data is a critical component in understanding how a transportation system reacts to the travel demands placed onto it. Moreover, traffic volumes are one of the most critical factors in determining a system's operations, that is how safely and efficiently they function. Therefore, a comprehensive collection of traffic volume data is vital to the description of corridor operations and the development and evaluation of corridor strategies. Fortunately for this study, a wealth of traffic volume data is available along I-70 as is discussed below.

Traffic Volume Data Sources

- MoDOT Counts (2005)
 - ➤ 2005 AM (6-8 a.m.) and PM (4-6 p.m.) peak period ramp volumes for interchanges of I-70 with Manchester Trafficway, Blue-Ridge Cut-Off, and Noland Road
 - ➤ 2005 hourly and daily volumes from January to June for several I-70 corridor locations
- MoDOT Historical Counts
 - ➤ 1973-2002 Average Annual Daily Traffic (AADT) on I-70 East of Paseo, west of Van Brunt, west of Manchester and east of U.S. 40, east of I-435, west of Noland Road, east of Selsa Road, west of MO-7,
 - and east of MO-7 (data for some years were not available for some locations)
 - Maximum hourly volumes for 1997-2003 for I-70 west of Noland Road
 - Daily volumes for 2003 for I-70 west of Noland Road
- Crawford, Bunte, Brammeier (CBB) Counts (2005)
 - AM (6-10 a.m.) and PM (3-7 p.m.) peak period ramp volumes at the interchanges of I-70 with I-435 and I-470
- Major Investment Study Data (2000)
 - ➤ 2000 I-70 mainline and ramp daily and AM/PM peak hour volumes
 - Truck percentage on mainline I-70 for daily and AM/PM peak periods

Historical AADT Growth

MoDOT District 4 provided historic automatic machine counts (AADT) for several locations along I-70 in the Study Area for the years 1973 to 2002. Volumes that were unavailable at some locations for certain years were estimated through interpolation. These historic volumes are

important in that they provide us with insights into how traffic volumes have grown on a facility over time, and more importantly whether current growth on a given facility is on-going or stagnant. The historic volumes along with the existing 2005 volumes are shown in **Figure D-1**. It can be seen that the traffic volumes along I-70 have been consistently increasing over the past 30 years.

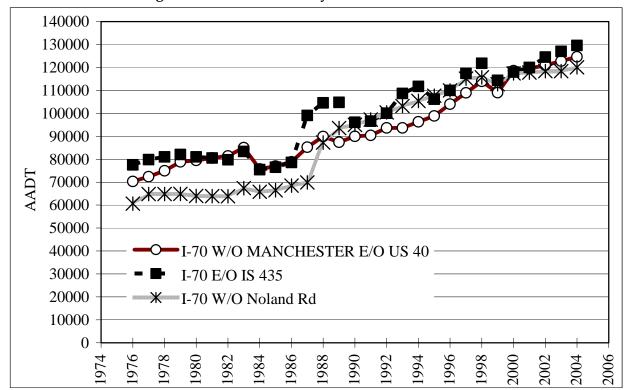


Figure D-1: Historical Daily Traffic Volumes on I-70

Daily Volume Variation

MoDOT District 4 also provided automatic machine counts (daily volumes) for I-70 West of Noland Road from January to December 2003. These are shown in **Figure D-2**. An inspection of this chart shows that daily volumes were relatively consistent throughout the year (between seasons) and that in general the highest traffic volumes occur on Fridays.

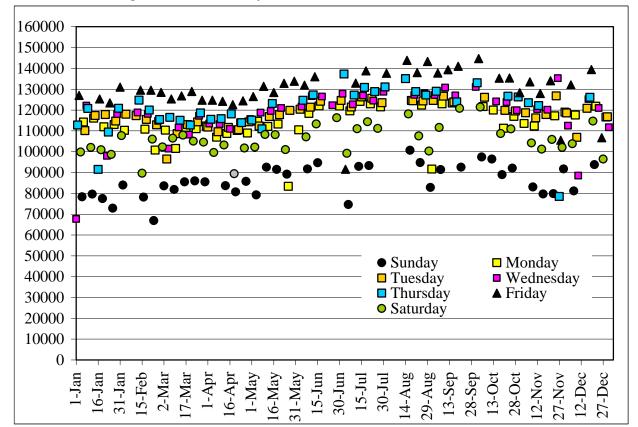


Figure D-2: 2003 Daily Volumes on I-70 West of Noland Road

Base Daily Counts

The Study Team consolidated several independent traffic counts in the development of a "base" set of 2005 existing traffic counts as discussed in the *Traffic Volume Data Sources* section. The consolidated traffic counts are shown in **Figure D-3**.

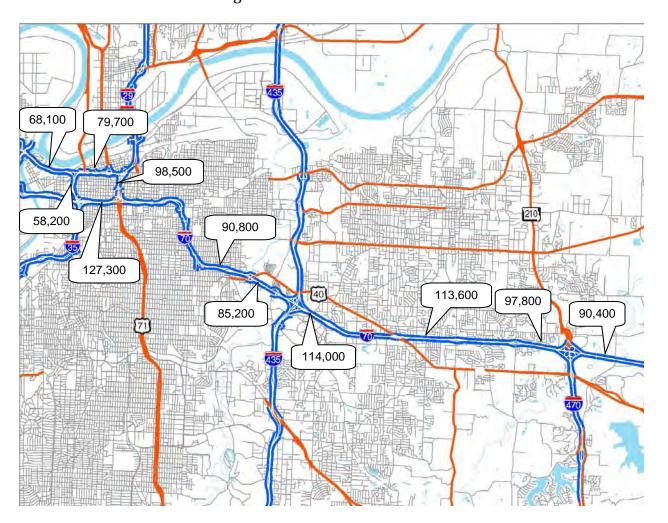
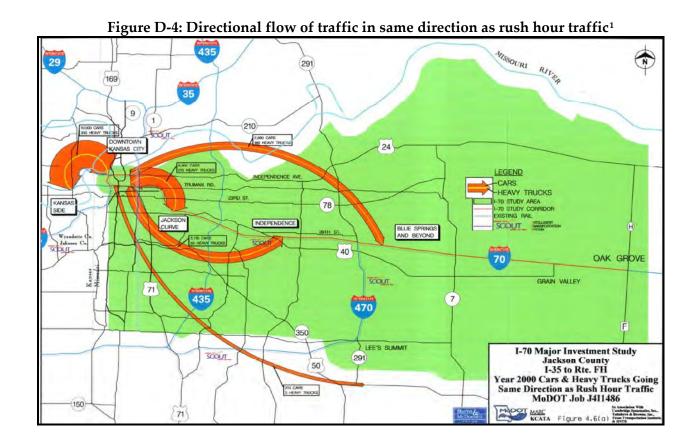


Figure D-3: 2005 Traffic Volumes

Directional Flow of Traffic

Commuter traffic in the study corridor is highly directional with most traffic destined towards the Kansas City Central Business District (CBD) during the morning and away from the CBD during the afternoon peak periods. The highly directional nature of the commuter traffic is important in its impact on freeway operations. As described in the *Freeway Operations* section, this characteristic is largely the cause for congestion and capacity failures in the system during the peak periods.

As reported in the I-70 Major Investment Study (MIS), **Figure D-4** shows the inbound AM and outbound PM peak rush hour traffic whereas **Figure D-5** shows the outbound AM and inbound PM peak traffic in the opposite direction as rush hour traffic. The orange band depicts car volumes and the yellow band depicts truck volumes.



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¹ I-70 MIS Jackson County, Technical Memorandum 1, "Problem Definition and Initial Statement of Purpose and Need", Section 4, Page 8, Figure 4.6 (a)

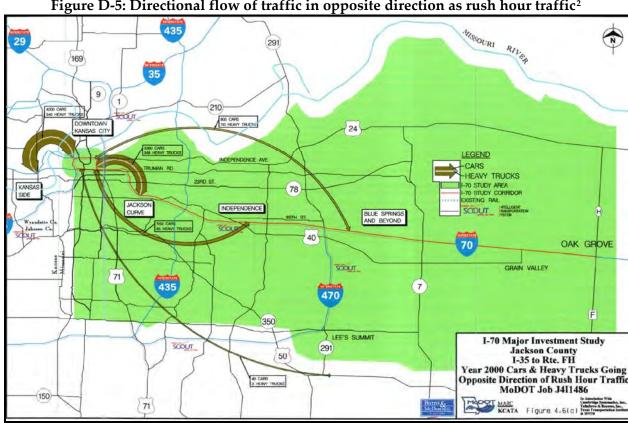


Figure D-5: Directional flow of traffic in opposite direction as rush hour traffic²

Trucks

Trucks are a major component of the traffic stream in the I-70 corridor. The daily truck percentage is approximately 11 percent, which is consistent with that of interstate corridors in urban areas. Truck percentages during the peak periods are higher towards the eastern parts of the Study Area due to the increase in commuter traffic towards downtown. Table D-1 shows the truck percentages for the daily, AM peak and PM peak hour conditions.

Table D-1: Truck Percentages on I-70

		AM	PM	Daily
Eastbound I-70	Downtown Loop to I-435	9%	4%	11%
	I-435 to I-470	10%	4%	11%
Westbound I-70	I-470 to I-435	4%	9%	11%
	I-435 to Downtown Loop	3%	8%	11%

² I-70 MIS Jackson County, Technical Memorandum 1, "Problem Definition and Initial Statement of Purpose and Need", Section 4, Page 10, Figure 4.6 (c)

Trucks impact the freeway operations in two significant ways. First, truck operations impact mainline traffic flow. While the percentage of trucks on mainline I-70 is relatively low in the peak direction during the peak periods, (approximately 3-4 percent of the overall traffic flow) it has been observed that the mixture of slow traffic and grades on the corridor often causes trucks to accelerate slowly, impeding traffic flow. Secondly, the major truck generators throughout the corridor have a significant impact on the operations of some of the corridor's interchanges.

As identified in the MIS, the current major truck traffic generators are located mostly outside the downtown loop and two additional locations are located near Bannister Road, which are in the western part of the Study Area. These locations are listed in **Table D-2**.

Table D-2: Major truck traffic generators in the Study Area-Year 2000

General Location	Number of Daily Trips*		
Kansas City, Front Street west of I-435	2,177		
Kansas City, Bannister Road Federal Complex	1,728		
Kansas City, Midtown Area	1,446		
Kansas City, Front Street east I-29/35	1,272		
Kansas City, Crown Center	1,243		
*Daily vehicle-trips by light-duty and heavy-duty trucks			

As described in the MIS, the largest generators of truck traffic in the study are the Kohl's distribution center at Adams Dairy Parkway, the Lake Ammunition Plant, the Lipton Tea factory on Noland Road, and a major retail center at I-470 and I-70. **Figure D-6** shows the major truck generators in the study area.

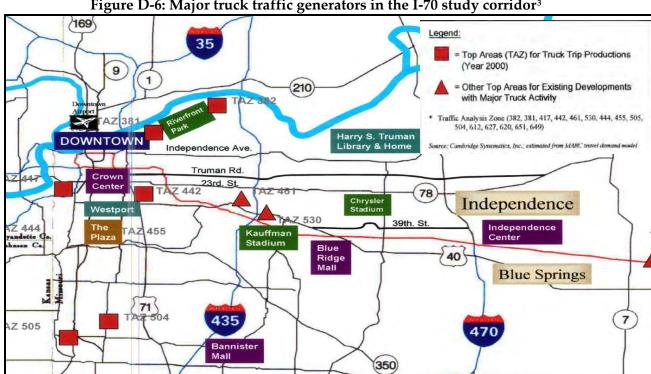


Figure D-6: Major truck traffic generators in the I-70 study corridor³

Freeway Operations

Freeway operations are impacted by many variables such as roadway geometrics, traffic volumes, driver aggressiveness, weather and lighting conditions, incidents, downstream bottlenecks, and vehicle compositions. As such, freeway operations are the amalgamation of all of a freeway corridor's characteristics discussed in the previous sections. In essence, freeway operations are the driver's daily experience on a particular freeway facility. This section explores the existing freeway operations on the I-70 corridor.

Regional Freeway Operations

The Kansas City region enjoys an extensive freeway system. As put in MARC's 2030 Long Range Transportation Plan:

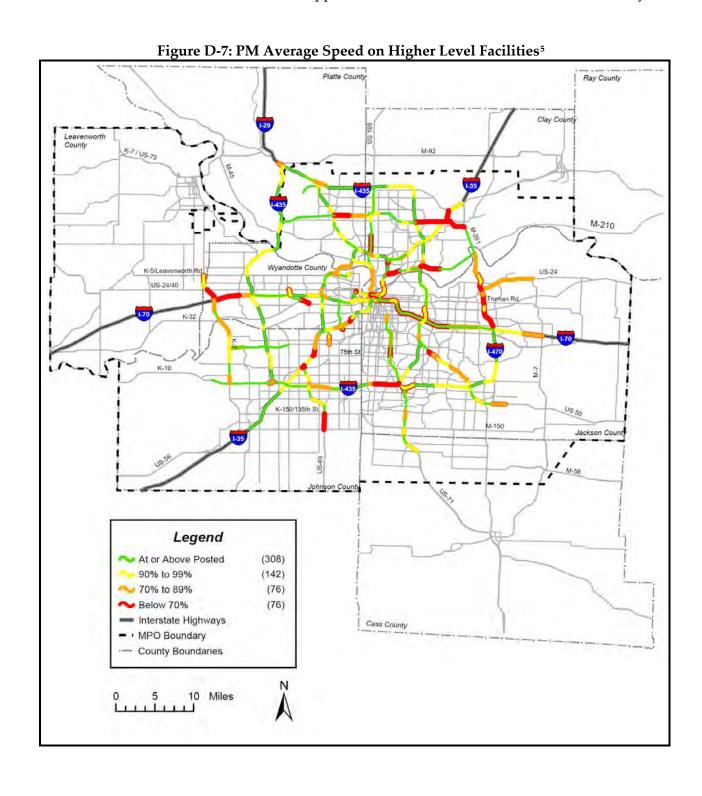
Kansas City's system of roadways is among the most extensive in the nation. Recently, new statistics made available from the Federal Highway Administration confirm that Kansas City continues to possess the most freeway miles per person of all urbanized areas with populations greater than 500,000. The Kansas City Metropolitan Area also has the fourth highest total roadway miles per person, the

³ I-70 MIS Jackson County, Technical Memorandum 1, "Problem Definition and Initial Statement of Purpose and Need", Section 5, Page 40, Figure 5.6 (k)

second highest estimated freeway lane miles per person, and the tenth most daily vehicle miles traveled (DVMT) per person.⁴

Because of this extensive freeway system, Kansas City drivers fare much better than other comparable urban areas in relation to freeway congestion. However, there are still facilities that operate at congested levels and would benefit from increased capacity. In fact, **Figure D-7** shows that I-70 is one of the congested corridors in the Kansas City region. Moreover, **Figure D-8** shows that this congestion has continually worsened over time to the point that corridor travel times to the CBD during peak periods now are near what they were before I-70 was constructed.

⁴ "Transportation Outlook 2030", Mid American Regional Council (MARC) Long Range Plan, Page 15



 $^{^{\}rm 5}$ "Transportation Outlook", MARC Long Range Plan, Page 22, Figure 2-19

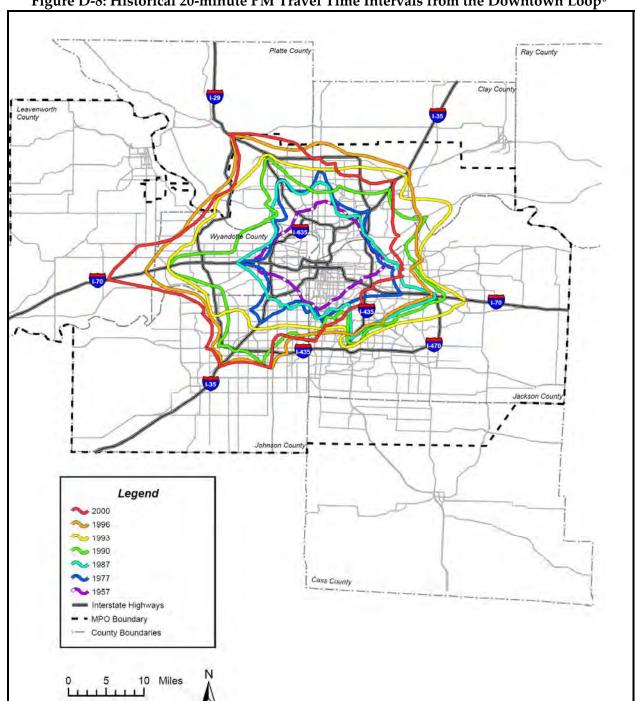


Figure D-8: Historical 20-minute PM Travel Time Intervals from the Downtown Loop⁶

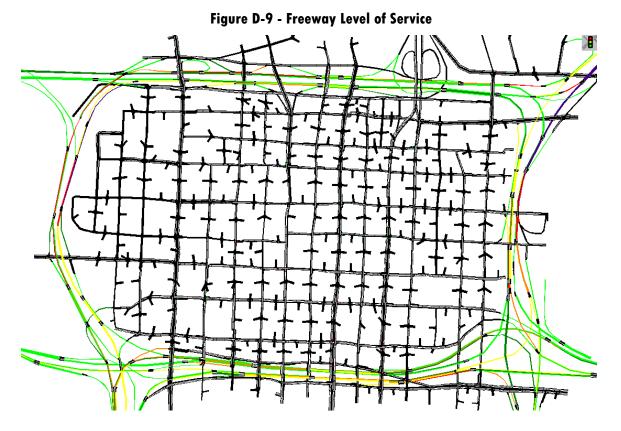
Corridor HCM Analysis

The downtown loop level of service analysis was based from the VISSIM model analysis completed for the Downtown Loop Study. VISSIM can be useful in obtaining freeway density

⁶ "Transportation Outlook", MARC Long Range Plan, Page 24, Figure 2-21

and speed data. There is a subtle difference between freeway density in VISSIM and freeway density as defined by the Highway Capacity Manual (HCM). Therefore, level of service (LOS) as defined in the HCM does not exactly match the level of service reported by VISSIM by applying HCM thresholds to VISSIM freeway density output. Still, the two are very similar and can give a reasonable idea of the operations of the freeways. Figure 17 applies the density thresholds from the HCM to the densities reported on the VISSIM freeway network by lane for the existing model. Green represents LOS C or better, yellow represents LOS D, orange represents LOS E, and red represents LOS F. There is also some dark blue that represents stopped vehicles.

Most of the existing problem areas are found in the corners of the loop. In the northeast corner, vehicles traveling to northbound I-29/I-35 are stop-and-go and back up to the north and east sides of the loop. In the northwest corner, vehicles exiting from the northbound side of the west loop to Broadway back up onto the mainline. Also in the northwest corner, vehicles following southbound I-35 around the north and west sides of the loop are delayed due to lane continuity and capacity issues from the southwest corner of the loop all the way back to the middle of the north loop in the westbound direction. The south loop operates at or near capacity in the eastbound direction and is volatile and sensitive to any small disruptions in traffic flow.



The Highway Capacity Software (HCS) was the primary tool used in the analysis of the I-70 operations. The HCS analysis procedures are based upon the methodologies outlined in the

"Highway Capacity Manual" (HCM), last updated in 2000 by the Transportation Research Board. The HCM 2000, which is used universally by highway and traffic engineers to measure roadway capacity, establishes criteria for six Levels of Service (LOS): Level A ("Free Flow") to Level F ("Breakdown Conditions").

Several Measures of Effectiveness (MOE) were used in this evaluation including: LOS, volume to capacity ratios (v/c), density, and travel speed. Although speed is a major indicator of service quality to drivers, freedom to maneuver within the traffic stream and proximity to other vehicles, as measured by the density of the traffic stream, are equally noticeable concerns. Density increases as flow increases up to capacity, resulting in a measure of effectiveness that is sensitive to a broad range of flows. For these reasons, density is the parameter used to define LOS for the freeway and ramp sections, as shown in **Table D-3**.

Level of Service	Freeway Weaving Segment Density (pc/mi/ln)	Basic Freeway Segment Density (pc/mi/ln)					
A	0 – 10	0 – 11					
В	> 10 – 20	> 11 – 18					
С	> 20 – 28	> 18 – 26					
D	> 28 – 35	> 26 – 35					
Е	> 35 – 43	> 35 – 45					
F	> 43.0	> 45.0					
(pc/mi/ln) - passenger car equivalent per mile per lane							

Table D-3: Freeway Level of Service Criteria

<u>Basic Freeway Segments</u> - HCS analysis was performed for all the freeway segments along I-70 in the Study Area for the AM and PM peak hours. **Tables D-4** and **D-5** summarize the LOS analysis. These tables show both the calculated LOS based on HCM methodologies using traffic volumes on I-70 as well as the LOS that were reported in the MIS, which was calculated using measured travel speeds. It should be noted that there are dramatic differences in the results that are reported largely because HCM Methodologies do not account for congestion caused by downstream bottlenecks, and therefore the LOS calculated by the HCM may represent operations that are better than actually occurs in the field. The methodologies that use field measured travel speeds do account for downstream bottlenecks and are more realistic under cases of major congestion.

However, these differences can also provide insights into some of the core capacity deficiencies in the corridor. Specifically, the 2005 "FTEIS" analysis of basic freeway segments shows operations generally in the range of LOS D/E, near the capacity of the freeway. However, the 2000 "MIS" analysis shows large portions of the freeway that are significantly over capacity. This pattern is indicative of corridors that have significant "choke points" that cause spill-back queues into freeway segments that might otherwise provide acceptable operations.

Table D-4: Summary of HCS Basic Freeway Segments (Peak Traffic Direction)

Table D-4: Summary of HCS Basic Freeway Segments (Peak Traffic Direction)							
	2005 FTEI	`	2000 MIS				
	Based on		`	S Based			
	Calculati	ions) ⁷	travel speed		·		
	Density	LOS	Density	LOS	Travel		
	pc/mi/ln		pc/mi/ln	200	Speed*		
AM Peak Period in	the Westbo	und Dir	ection				
Between Brooklyn and Prospect	N/A	F	56	F	17.3		
Between Benton and 18th St.	43.4	E	60	F	29.3		
Between 23rd St. and 27th St.	36.6	E	60	F	33.3		
Between 27th St. and Jackson	34.3	D	64	F	32.9		
Between Jackson and Van Brunt	37.1	E	55	F	35		
Between Van Brunt and U.S. 40	40.5	E	73	F	35.7		
Between U.S. 40 and Manchester	32.7	D	52	F	60.4		
Between I-435 and Blue Ridge Cut Off	24.9	С	41	Е	58.1		
Between Blue Ridge Cut Off and U.S. 40	32.9	D	41	Е	49		
Between U.S. 40 and Noland Road	32.6	D	41	Е	47.6		
Between Noland Road and Lee's Summit	30.1	D	43	Е	46.3		
Between Lee's Summit and I-470	27.8	D	38	Е	59.8		
PM Peak Period in	the Eastbo	und Dire	ection				
Between Brooklyn and Prospect	43.1	Е	42	Е	34.6		
Between Prospect and Benton	36.9	Е	40	Е	40.8		
Between Benton and 18th St.	33.1	D	47	F	40.8		
Between 23rd St. and 27th St.	31.2	D	40	Е	41.3		
Between 27th St. and Jackson	29.8	D	67	F	35.4		
Between Jackson and Van Brunt	28.8	D	70	F	29.6		
Between Van Brunt and U.S. 40	29	D	66	F	21.1		
Between U.S. 40 and Manchester	24.8	С	63	F	23.8		
Between I-435 and Blue Ridge Cut Off	38.2	Е	52	F	29.4		
Between Blue Ridge Cut Off and U.S. 40	36.9	Е	43	Е	39		
Between U.S. 40 and Noland Road	39	E	37	Е	52.2		
Between Noland Road and Lee's Summit	35.9	Е	30	D	60.7		
Between Lee's Summit and I-470	31.9	D	28	D	60.8		
*Travel Speeds reported from MIS		•					
(pc/mi/ln) - passenger car equivalent per mile per lan	e						

⁷ HCM Methodologies do not account for congestion caused by downstream bottlenecks. Therefore, LOS displayed may represent better operations than actually occurs in the field.

Table D-5: Summary of HCS Basic Freeway Segments (off-Peak Traffic Direction)

Table D-5: Summary of HCS Basic Freeway Segments (off-Peak Traffic Direction)							
	2005 1	FTEIS					
	(LOS Base	d on HCM	2000	MIS			
	Calculations)						
	Density	LOS	Density	LOS			
	pc/mi/ln	100	pc/mi/ln	100			
AM Peak Period ir	the Eastbou	nd Direction	1				
Between Brooklyn and Prospect	17.9	В	18	В			
Between Benton and 18th St.	14.7	В	17	В			
Between 23rd St. and 27th St.	15.3	В	16	В			
Between 27th St. and Jackson	14.6	В	15	В			
Between Jackson and Van Brunt	14.9	В	11	A			
Between Van Brunt and U.S. 40	14.5	В	15	В			
Between U.S. 40 and Manchester	15	В	13	В			
Between I-435 and Blue Ridge Cut Off	13.1	В	13	В			
Between Blue Ridge Cut Off and U.S. 40	16.3	В	12	В			
Between U.S. 40 and Noland Road	15.4	В	13	В			
Between Noland Road and Lee's Summit	14.1	В	12	В			
Between Lee's Summit and I-470	14.1	В	11	A			
PM Peak Period in	the Westbou	ınd Direction	า				
Between Brooklyn and Prospect	24.1	С	17	В			
Between Prospect and Benton	23.1	С	15	В			
Between Benton and 18th St.	19.4	С	20	С			
Between 23rd St. and 27th St.	18.8	С	16	В			
Between 27th St. and Jackson	17.4	В	17	В			
Between Jackson and Van Brunt	18.5	С	16	В			
Between Van Brunt and U.S. 40	18.3	С	17	В			
Between U.S. 40 and Manchester	18.1	С	12	В			
Between I-435 and Blue Ridge Cut Off	14.3	В	15	В			
Between Blue Ridge Cut Off and U.S. 40	18.3	С	15	В			
Between U.S. 40 and Noland Road	18.7	С	17	В			
Between Noland Road and Lee's Summit	18	С	15	В			
Between Lee's Summit and I-470	18	С	15	В			
(pc/mi/ln) - passenger car equivalent per mile per lane							

<u>Merge/Diverge Areas</u> - HCS analysis was performed on all merge and diverge areas along I-70 in the Study Area for the AM and PM peak hours. **Tables D-6** to **D-9** shows that although the ramps generally operate at acceptable LOS, there are isolated capacity failures at some of the ramps during select time periods. These failures are typical of corridor "chokepoints" that can spill-back and compromise mainline operations.

Table D-6: Summary of HCS analysis for merge and diverge areas along I-70 (AM Peak Hour)

		2005 FT	EIS	2000 MIS		
LOCATION	MOVEMENT	DENSITY (pc/mi/ln)	LOS	DENSITY (pc/mi/ln)	LOS	
	WB/NB DIVERGE	25.5	С	29	D	
I-70 / I-470	SB/WB MERGE	29.6	D	30.9	D	
	EB/SB DIVERGE	17.9	В	15.9	В	
	NB/EB MERGE	15.5	В	14.4	В	
	EB DIVERGE	19.5	В	17.7	В	
I-70 / LEE'S SUMMIT	EB MERGE	17.9	В	16.3	В	
I-70 / LEE 3 30 WINIT	WB DIVERGE	32.2	D	33.1	D	
	WB MERGE	32.2	D	34.2	D	
	EB DIVERGE	21.6	С	20	С	
I-70 / NOLAND	EB MERGE	18.2	В	16.5	В	
I-70 / NOLAND	WB DIVERGE	33.8	D	34.6	D	
	WB MERGE	32	D	34.3	D	
I-70 / BLUE RIDGE BLVD.	EB MERGE	18.7	В	17.3	A	
	EB DIVERGE	1.1	A	13.3	В	
I-70 / U.S. 40 EAST	EB MERGE	19.2	В	17.8	В	
1-70 / U.S. 40 EAST	WB DIVERGE	35.2	E	35	E	
	WB MERGE	33.9	D	34.9	D	
I-70 / STERLING	EB DIVERGE	18.1	В	16.6	В	
	EB DIVERGE	13.6	В	12.4	В	
I-70 / BLUE RIDGE	EB MERGE	18.1	В	15.7	В	
CUTOFF	WB DIVERGE	33.2	D	33	D	
	WB MERGE	26	С	25.6	С	
	WB/NB DIVERGE	N/A	A	N/A	A	
I-70 / I-435	WB/SB DIVERGE	39.7	F	37.1	F	
	NB/SB/EB MERGE	14.1	В	12.7	В	
(pc/mi/ln) - passenger car equiva	alent per mile per lane					

Table D-7: Summary of HCS analysis for merge and diverge areas along I-70 (AM Peak Hour)

		2005 FT	EIS	2000 MIS		
LOCATION	MOVEMENT	DENSITY (pc/mi/ln)	LOS	DENSITY (pc/mi/ln)	LOS	
I-70 / MANCHESTER	EB DIVERGE	19.9	В	20.8	С	
1-70 / MANCILESTER	WB MERGE	31.2	D	30.7	D	
	EB DIVERGE	17.3	В	18	В	
I 70 / II C 40 MECT	EB MERGE	17.9	В	18.7	В	
I-70 / U.S. 40 WEST	WB DIVERGE	32.1	D	31.1	D	
	WB MERGE	35.2	E	37.3	Е	
	EB DIVERGE	19	В	21.4	С	
I 70 / WANI DDIINIT	EB MERGE	15.3	В	19.7	В	
I-70 / VAN BRUNT	WB DIVERGE	38.3	Е	37.4	Е	
	WB MERGE	31.3	D	32.2	D	
I 70 / I A CI/CONI	WB DIVERGE	32.3	D	31.4	D	
I-70 / JACKSON	EB MERGE	18	В	18	В	
I-70 / 31ST	EB DIVERGE	17.5	В	18.2	В	
I EO / OFTII	EB DIVERGE	18.3	В	19	В	
I-70 / 27TH	WB MERGE	35.1	Е	34	D	
	EB DIVERGE	18.4	В	19.1	В	
I 50 / 22DD	EB MERGE	16.9	В	17.5	В	
I-70 / 23RD	WB DIVERGE	34.3	D	33.4	D	
	WB MERGE	36.8	F	37.9	Е	
	EB DIVERGE	18.6	В	19.3	В	
I 50 / 10TH	EB MERGE	19.1	В	19.7	В	
I-70 / 18TH	WB DIVERGE	37.7	F	36.9	F	
	WB MERGE	35.4	F	35.5	F	
LEO / DENITONI	WB MERGE	19.1	В	19	В	
I-70 / BENTON	EB DIVERGE	22.1	С	22.8	С	
	EB DIVERGE	9.9	A	10.5	В	
I 50 / DD CODE CE	EB MERGE	17.1	В	17.7	В	
I-70 / PROSPECT	WB DIVERGE	36.5	Е	35.6	Е	
	WB MERGE	21.9	С	21.4	С	
I FO / DDOOL/I MAI	EB DIVERGE	19.2	В	19.8	В	
I-70 / BROOKLYN	WB MERGE	26.4	С	25.8	С	
	EB DIVERGE	21.5	С	22.2	С	
	EB MERGE	18.1	В	18.9	В	
I-70 / PASEO	WB DIVERGE	34.1	D	33.4	D	
	WB MERGE	22.7	C	23.3	C	
oc/mi/ln) - passenger car equiv	1			20.0		

Table D-8: Summary of HCS analysis for merge and diverge areas along I-70 (PM Peak Hour)

-		2005 FT	EIS	2000 MIS		
LOCATION	MOVEMENT	DENSITY (pc/mi/ln)	LOS	DENSITY (pc/mi/ln)	LOS	
	WB/NB					
	DIVERGE	17.4	В	17.2	В	
I-70 / I-470	SB/WB MERGE	21.1	С	19.8	В	
	EB/SB DIVERGE	34	D	33.8	D	
	NB/EB MERGE	29.3	D	29.9	D	
	EB DIVERGE	37.1	E	36.9	Е	
I-70 / LEE'S SUMMIT	EB MERGE	32.5	D	33.4	D	
1-70 / LEE 3 SUMMIT	WB DIVERGE	23.8	С	22.4	С	
	WB MERGE	22.1	С	20.8	С	
	EB DIVERGE	38.5	E	37.7	Е	
I 70 / NIOI ANID	EB MERGE	35.5	E	36.4	Е	
I-70 / NOLAND	WB DIVERGE	24.2	С	22.8	С	
	WB MERGE	23.6	С	22.3	С	
I-70 / BLUE RIDGE BLVD.	EB MERGE	37.2	E	36.6	E	
	EB DIVERGE	14.6	В	29	D	
1 70 / 11 C 40 F A CF	EB MERGE	34.8	D	34.4	D	
I-70 / U.S. 40 EAST	WB DIVERGE	24.9	С	23.6	С	
	WB MERGE	21.4	С	21.8	С	
I-70 / STERLING	EB DIVERGE	33.1	D	32.6	D	
	EB DIVERGE	26.6	С	25.9	С	
I-70 / BLUE RIDGE	EB MERGE	33	D	19.4	В	
CUTOFF	WB DIVERGE	22	С	20.7	С	
	WB MERGE	10.9	В	9.8	A	
	WB/NB					
I-70 / I-435	DIVERGE	N/A	A	N/A	A	
	WB/SB DIVERGE	18.5	В	15	В	
	NB/SB/EB MERGE	31.7	F	31.8	F	
(pc/mi/ln) - passenger car equiva		— 01. /				

Table D-9: Summary of HCS analysis for merge and diverge areas along I-70 (PM Peak Hour)

Table D-9: Summary of H		2005 FT		ĭ	2000 MIS		
LOCATION	MOVEMENT	DENSITY (pc/mi/ln)	LOS	DENSITY (pc/mi/ln)	LOS		
I 70 / MANICHECTED	EB DIVERGE	32.4	D	32	D		
I-70 / MANCHESTER	WB MERGE	19.5	В	16.8	В		
	EB DIVERGE	30.8	D	30.5	D		
I 70 / II C 40 M/ECT	EB MERGE	29	D	30.4	D		
I-70 / U.S. 40 WEST	WB DIVERGE	20.2	С	17.3	В		
	WB MERGE	19.9	В	17.9	В		
	EB DIVERGE	31.4	D	31	D		
I TO / NANI DDI INIT	EB MERGE	27.4	С	30	D		
I-70 / VAN BRUNT	WB DIVERGE	23.6	С	20.7	С		
	WB MERGE	16	В	16	В		
I 70 / I A CI/CONI	WB DIVERGE	18.9	В	16	В		
I-70 / JACKSON	EB MERGE	30.4	D	30	D		
I-70 / 31ST	EB DIVERGE	31.5	D	31.2	D		
I 70 / 27TI	EB DIVERGE	32	D	31.7	D		
I-70 / 27TH	WB MERGE	21.4	С	17.1	В		
	EB DIVERGE	34.3	D	34	D		
I 50 / 20DD	EB MERGE	29.5	D	30.1	D		
I-70 / 23RD	WB DIVERGE	21.2	С	16.3	В		
	WB MERGE	20.8	С	16.6	В		
	EB DIVERGE	34	D	33.7	D		
I 70 / 10TH	EB MERGE	33.6	D	34.3	D		
I-70 / 18TH	WB DIVERGE	22.6	С	17.8	В		
	WB MERGE	20.7	С	16.4	В		
I 70 / DENITONI	WB MERGE	14.4	В	13.2	В		
I-70 / BENTON	EB DIVERGE	37.6	Е	37.3	Е		
	EB DIVERGE	25.9	С	25.7	С		
I 70 / DDOCDECT	EB MERGE	31.6	D	33.1	D		
I-70 / PROSPECT	WB DIVERGE	20.5	С	17	В		
	WB MERGE	14.2	В	12.5	В		
I 70 / DDOOM NA	EB DIVERGE	40.4	F	40.3	F		
I-70 / BROOKLYN	WB MERGE	15.3	В	12.9	В		
	EB DIVERGE	36.5	F	36.3	F		
I 70 / DACEO	EB MERGE	33.7	F	36.6	F		
I-70 / PASEO	WB DIVERGE	17.8	В	14.2	В		
	WB MERGE	14.7	В	12.9	В		
(pc/mi/ln) - passenger car equiv	alent per mile per lane						

<u>Weave Sections</u> - HCS analysis was performed for all the weaving sections along I-70 in the study area for the AM and PM peak hours. **Table D-10** shows the effects of several sub-standard weaving areas in the corridor. As with other capacity failures in the corridor, these failures are typical of corridor "chokepoints" that can spill-back and compromise mainline operations.

Table D-10: Summary of HCS analysis for weaving segments

		2005 FTE	IS	2000 MIS	
LOCATION	WEAVE TYPE	DENSITY (pc/mi/ln)	LOS	DENSITY (pc/mi/ln)	LOS
AM	A Peak Period	d			
EB I-70 B/T 18TH & 23RD	A	12.5	В	13.32	В
EB I-70 B/T MANCHESTER & I-435	В	11.76	В	12.57	В
EB I-70 B/T PASEO & BROOKLYN	A	11.64	В	12.12	В
WB I-70 B/T 23RD & 18TH	A	45.94	F	44.08	F
WB I-70 B/T I-435 & MANCHESTER	В	35.65	E	35.01	E
WB I-70 B/T BENTON & PROSPECT+	В	34.1	D	42.19	E
WB I-70 B/T BROOKLYN & PASEO	A	36.16	E	34.93	D
EB I-70 B/T I-470 LOOP RAMPS	A	10.64	В	9.58	A
WB I-70 B/T I-470 LOOP RAMPS*	A	52.54	E	41.88	E
PN	I Peak Perioc	1			
EB I-70 B/T 18TH & 23RD	A	35.03	E	34.49	D
EB I-70 B/T MANCHESTER & I-435	В	24.85	С	27.73	С
EB I-70 B/T PASEO & BROOKLYN	A	28.21	D	27.89	С
WB I-70 B/T 23RD & 18TH	A	16.85	В	12.02	В
WB I-70 B/T I-435 & MANCHESTER	В	17.94	В	16.92	В
WB I-70 B/T BENTON & PROSPECT+	В	15.4	В	13.19	В
WB I-70 B/T BROOKLYN & PASEO	A	16.02	В	12.45	В
EB I-70 B/T I-470 LOOP RAMPS	A	28.6	D	25.12	С
WB I-70 B/T I-470 LOOP RAMPS*	A	21.95	С	15.37	В

⁺ The MIS evaluated the westbound weave between Benton and Prospect as a Type "A" weave

Summary

The preceding analysis shows that relatively severe congestion does exist in the I-70 corridor coincides with the commuter peak. Moreover, this analysis shows that much of this congestion is likely caused by sub-standard merge, diverge, and weave areas. However, even with these problems corrected, the corridor is currently operating at or near its basic capacity. That is to

^{*} Constrained Weaving

⁽pc/mi/ln) - passenger car equivalent per mile per lane

say, in addition to improving the merge, diverge, and weave sections in the corridor, basic capacity enhancements (e.g., lane additions) are prudent to address the existing needs.

Additionally, it does not appear that operations in the corridor have changed significantly between 2000 and 2005. It is interesting to note that peak period volumes are not significantly changing even though the daily traffic volumes are growing as the corridor's population grows and shifts to the west (away from major regional employment centers). This is likely due to driver's changing their trip time, destination, and/or route to avoid the over-saturated freeway corridor during the peak periods. This trend usually creates a "latent" demand in the corridor. That is to say that if capacity is added, corridor peak period traffic volumes are likely to jump as travel times are reduced and drivers adjust their travel decisions to account for the improved conditions.

Finally, we explored some specific locations that appear to be major corridor "chokepoints", as is discussed in the following.

• <u>Downtown Loop</u>

The Downtown loop is congested in the peak hours due to a lane balance issue and tight weaving sections between interchanges. The incoming AM peak is a bottleneck largely because of the congestion from I-670. The outgoing PM peak experiences congestion due to a lane drop at Prospect Avenue: there is one incoming lane from the downtown loop, one incoming lane from downtown, two incoming lanes from I-670 but only three outgoing lanes east of Prospect Avenue.

Benton/Jackson Curves

These curves have substandard interstate operations and geometrics due to poor sight distance and high roadway curvature (speed limit: 55 mph). Although these curves are not a major source of congestion at present, these are areas of high crash rates according to the MIS.

• I-435

I-70 at the I-435 interchange experiences congestion in the AM peak period in the westbound direction and in the PM peak period in the eastbound direction. This is caused by lane drops through the interchange and steep grades on I-70 leaving the interchange.

Noland Road

I-70 at the Noland Road interchange experiences congestion in the AM peak period in the westbound direction and in the PM peak period in the eastbound direction. This can likely be attributed to insufficient ramp capacity, (especially during the PM peak period), grades, and acceleration and deceleration lanes between ramps and mainline.

• <u>I-470</u>

At the I-70/I-470 interchange congestion tends to occur on I-470 and not on I-70 including tight weaving sections on I-470 north and south of I-70. This congestion affects traffic flow onto and off of I-70.

Appendix C			
	Initial Strategy Pa	ckages Summary	Memorandum

FUTURE I-70 Kansas City Metro STAYING AHEAD OF THE CURVE

Memorandum



Date: January 15, 2009

To: I-70 FTEIS Resource Agencies

From: I-70 FTEIS Project Team

Subject: I-70 First Tier Environmental Impact Statement, Kansas City Metro

Job No. J4I1486B

I-70 FTEIS Initial Strategy Packages Summary

The following is an initial strategy packages summary and evaluation for the I-70 First Tier Environmental Impact Statement (FTEIS). Fifteen initial strategy packages were developed and evaluated. The first seven strategy packages evolved from the I-70 Major Investment Study (MIS) with the elements outside of the I-70 FTEIS study area removed. Eight other packages are focused goal oriented strategy packages based on the purpose and need of the I-70 FTEIS and/or particular issues in the corridor. The initial strategy packages were revised based on public and stakeholder input.

These strategy packages have been screened against purpose and need goals of improve safety, reduce congestion, restore and maintain existing infrastructure, improve accessibility across the corridor, and improve goods movement. Natural and human impacts, as well as engineering issues and anticipated relative costs, also were evaluated. A Summary Matrix is located **Appendix B**. A section on public comments also follows the initial screening and summarizes public input into the initial concepts evaluation.

The overall purpose of the I-70 FTEIS is to determine an improvement strategy for the corridor, including future capacity and mode choices, which addresses the following items.

- *Improve Safety:* Reduce crash rates and crash severity on I-70 and the downtown loop.
- <u>Reduce Congestion:</u> Remove key bottlenecks, reduce the potential for ramp backup onto the freeway, and improve multi-modal travel times in coordination with plans put forward by local and regional agencies.

- <u>Restore and Maintain Existing Infrastructure:</u> Improve the long-term bridge and pavement conditions on I-70 and the downtown loop and implement cost-effective investment strategies.
- *Improve Accessibility:* Provide travel options for all residents, increase safe access across I-70 and the downtown loop for non-motorized travel, and support local and regional land use plans.
- *Improve Goods Movement:* Improve the efficiency of freight movement on I-70 and the downtown loop.

The strategy packages were evaluated on a three level criteria with regards to Purpose and Need. There were assigned one of the following for each goal of the Purpose and Need:

- Meets Purpose and Need goal
- Does not meet the Purpose and Need goal
- Worse than existing conditions

The criteria to meet the Purpose and Need goals are defined as:

- <u>Improve safety</u> The strategy includes improvements to address all or most of the locations with crash rates above the statewide average. The strategy allows for the implementation of standard safety improvements MoDOT is making on freeway corridors statewide.
- Reduce congestion The strategy includes measures that increase the capacity of the I-70 corridor and/or increase transit service and use that would be sufficient to anticipate a reduction in congestion to acceptable levels per the Engineering Policy Guide.
- Restore/maintain the existing infrastructure The strategy includes corridor
 wide rehabilitation and/or rebuilding of the existing highway either in place or
 as part of a capacity expansion and thus would renew the long-term condition of
 the pavement and base in the I-70 corridor.
- <u>Improve accessibility</u> The strategy includes reasonable measures to enhance crossing of the corridor for non-motorized travel and increases the effectiveness of transit options in the corridor.
- <u>Improve goods movement</u> The strategy provides safety and congestion improvements (as defined above) that would effectively serve freight movements in the corridor in addition to passenger vehicles and/or the strategy includes specific features to effectively improve freight movement in the corridor.

The Study Team also performed a cursory evaluation of the natural environment, human environment, and engineering issues facing each package. The natural environmental impacts relate to the anticipated affect on air quality, floodplains, streams, wetlands, or natural sites. The human environmental impacts include any community, neighborhood, or business resources that may be affected by the strategy packages. The rating of each included:

- Fatal Flaw illegal or unusually devastating impacts for a project of this type and location
- High impacts substantially higher than most of the other strategies
- Medium impacts similar to most other packages
- Low impacts substantially lower than most of the other packages

The Study Team did not identify any fatal flaws for any strategy package.

In addition, the final evaluation was relative costs of each strategy package. The strategy packages were given one of the ratings below:

- Strategy packages would have minimal additional cost beyond what is anticipated for long-term maintenance.
- \$\$ Strategy packages anticipated to have substantially lower costs than most packages proposed.
- \$\$\$ Strategy packages that add capacity/lanes to urban freeway corridors would cost in the hundreds of millions or billions of dollars are considered high cost.
- \$\$\$\$ Strategy packages anticipated to have a cost that is orders of magnitude higher than other strategies.

The complete screening criteria definitions are located in **Appendix A**. A summary table of the evaluation can be found in the **Appendix B**.

Initial Strategy Package 1: No-Build

This package contains the base or No-Build condition. The No-Build Package originates from the I-70 MIS and includes maintenance activities as needed and projects already committed to in MoDOT's Statewide Transportation Improvement Program. As such, the No-Build approach is a needed level of effort required to address the major safety and maintenance problems. This includes activities such as maintaining the existing bus service, committed upgrades to the I-435 interchange, committed upgrades to the Central Business District Loop's northeast corner, repave I-70 through regular

maintenance, Transportation System Management (TSM) and Transportation Demand Management (TDM) activities; and upgrade the I-70 interchanges and bridges (as identified on MoDOT Bridge List). Over time, maintenance would occur as needed.

The No-Build Strategy would lead to further implementation of Transportation System Management (TSM) and Travel Demand Management (TDM) initiatives. TSM programs identified in MARC's Congestion Management System toolbox includes traffic signal coordination, enhanced freeway incident detection and management, ramp metering, advance traveler information systems, and highway information systems. Two elements – enhanced freeway incident detection and management and advance traveler information systems are already in place along I-70. TDM concepts in MARC's toolbox include alternate work hours, telecommuting, ridesharing, and preferential carpool parking. These measures could be implemented as a part of the No-Build or any of the Build Strategies.

The No-Build strategy package will address the purpose and need goals as follows:

- Improve safety There is no improvement to safety expected as the traffic flow is
 expected to become more intermittent with stop/slow and go traffic patterns
 during peak commuter times which tend to result in more crashes. The No-Build
 also does nothing to address the substantially higher than average crash rates
 occurring at various points in the corridor as discussed in the purpose and need,
 including the speed reduced curves at Benton Boulevard and Jackson Avenue.
- Reduce congestion There is no improvement expected as the forecasted traffic volumes continue to grow at a slow rate between 2008 and 2030.
- Restore/maintain the existing infrastructure There is minimal improvement expected as routine maintenance may be required to reconstruct I-70 over time, the work will be spot specific and not through the entire corridor.
- <u>Improve accessibility</u> There is little or no improvement expected to improve accessibility across I-70 or the downtown loop freeway.
- <u>Improve goods movement</u> There is no improvement expected for goods movement. Congestion would continue to rise.

	Improve Safety	Reduce Congestion	Restore/Maintain Existing Infrastructure	Improve Accessibility	Improve Goods Movement
Strategy Package 1	Does Not	Does Not	Does Not	Does Not	Does Not
No-Build	Meet	Meet	Meet	Meet	Meet

Potential natural impacts include worsening air quality due to higher congestion. There would be no major impacts to the social or cultural environment from the No-Build. The No-Build baseline package does not raise any red flags from the engineering aspect. The No-Build baseline package is required to be carried forward for more detailed evaluation as a comparison to the other strategy packages carried forward.

Initial Strategy Package 2: Fix Key Bottlenecks

Package 2 originates from the I-70 MIS and includes everything listed under Package 1 in addition to activities such as:

- Rehabilitation and/or rebuilding I-70 to its existing six-lane configuration from the Central Business District Loop to I-470 including obsolete or deficient bridges
- Improving lane balance in the downtown loop and consolidate downtown loop interchanges to one access point on the north and east sides to improve traffic flow and safety.
- Consolidating loop access on the north and east legs
- Building some low-cost interchange improvements
- Using collector distributor roads at key locations
- Improving the I-70 curves at Benton Boulevard and Jackson Avenue
- Upgrading the Truman Road Interchange
- Upgrading the I-435 interchange as noted in the I-435 MIS
- Advancing Operation Green Light and integrating advance public transportation systems (parallel arterial management systems)
- Expanding express bus service, including park and ride facilities
- Providing for bus on shoulder operation
- Expanding incident management and motorist assist service patrols

Completing this package would rebuild I-70 with its existing lane configuration and would renew the long-term pavement and road base conditions with an infrastructure design life to last 30-50 years to eliminate the need for costly investments in more frequent rehabilitation and reconstruction. Routine pavement maintenance will continually occur.

Package 2 will address the purpose and need goals as follows:

• <u>Improve safety</u> – There are safety improvements expected as the traffic flow is improved through the existing key bottlenecks reducing the speed reductions at these locations. Fixing the bottlenecks would address several of the locations in the corridor where crash rates are substantially above the state average.

- <u>Reduce congestion</u> Congestion would be reduced as the traffic flow is improved through the existing bottleneck areas. As traffic flow is improved through the existing bottlenecks, new bottlenecks could emerge downstream over time.
- <u>Restore/maintain the existing infrastructure</u> There are improvements expected
 in this package that will rehabilitate and/or rebuild the entire roadway in the
 existing corridor to renew the long-term condition of the pavement and road
 base conditions.
- <u>Improve accessibility</u> There are improvements expected to accessibility across I-70 or the downtown loop freeway through pedestrian and non-motorized improvements made during interchange replacements, as well as bus on shoulder provisions.
- <u>Improve goods movement</u> There are expected improvements for goods movement through improved traffic flow at bottleneck locations. However, the package includes no specific improvement for freight movement.

	Improve Safety	Reduce Congestion	Restore/Maintain Existing Infrastructure	Improve Accessibility	Improve Goods Movement
Strategy Package 2 Fix Key Bottlenecks	Meets	Meets	Meets	Meets	Meets

No significant adverse impacts are expected to the natural environment. Noise is a continued human environmental impact. The study area is also scattered with churches, parks, and other community facilities near the existing corridor. Another human environmental concern is the low income and/or minority neighborhood impacts that are located adjacent to the corridor. Cultural resource impacts may occur in the downtown loop with a high concentration of historic districts and buildings on, or eligible for, the National Register of Historic Places.

There are engineering issues associated with Package 2 related to narrow right of way and steep side slopes at key points. Construction activities to rehabilitate and/or rebuild I-70 will create traffic delays due to reduced lanes. Fixing the key bottlenecks would provide an improved traffic flow through the previous choke points; however, the downstream impact will be evaluated to determine if other issues or bottlenecks result. Package 2 can be a stand alone strategy for the I-70 FTEIS. Elements of Package 2 can also be used in combination with other concepts. Concepts from Package 12 - Collector Distributor Roads Alternative could be implemented as a spot improvement at key locations as part of an enhanced Package 2 carried forward.

Initial Strategy Package 3: Fix Key Bottlenecks plus HOV Lanes

This package provides the infrastructure to better support choices between travel options. Package 3 includes everything from Package 2 in addition to adding managed/ High-Occupancy Vehicle (HOV) Lanes (toll optional) from the downtown loop to U.S. 40/Blue Ridge Boulevard. Package 3 originates from the I-70 MIS.

HOV lanes are physically separated lanes by a barrier, striping, or signing from the adjacent general purpose lanes. Adding two HOV lanes is proposed between I-470 and the downtown loop for this concept and could be reversible with the flow of peak congested traffic. HOV lanes are exclusive lanes for vehicles with high passenger occupancy (two or more people). HOV lanes can move more people during congested periods with fewer vehicles because of the higher number of occupants. The toll option for this package includes High Occupancy Toll (HOT) Lanes, which are lanes for vehicles with high passenger occupancy, but may also be used by single occupancy vehicles for a toll.

Package 3 includes activities such as adding HOV and/or reversible flow express lanes on I-70, upgrading interchanges along I-70 to accommodate additional mainline lanes, improving the Benton and Jackson curves, considering toll options (i.e., HOT Lanes), integrating the Smart Moves Regional Transit Vision, and supporting transit centers.

Package 3 will address the purpose and need goals as follows:

- <u>Improve safety</u> There are safety improvements expected as the general purpose lane traffic flow is improved through some traffic using the HOV lanes resulting in more efficient traffic flow. Fixing the key bottlenecks would address several locations with crash rates higher than the statewide average including improvements to the Benton and Jackson curves.
- <u>Reduce congestion</u> There are expected congestion reductions as some existing traffic will divert from the general purpose lanes to the HOV lanes. The fixed bottlenecks would also result in reduction of congestion at key points.
- Restore/maintain the existing infrastructure There are improvements expected as this package will rehabilitate and/or rebuild the entire roadway in the existing corridor to renew the long-term condition of the pavement and road base conditions. This package also provides for bus on shoulders within the corridor.
- <u>Improve accessibility</u> There are improvements expected to improve accessibility across I-70 or the downtown loop freeway through pedestrian and non-motorized improvements made during interchange replacements. Bus

- transit could operate in the HOV lanes dependent on the needs of the particular transit route.
- <u>Improve goods movement</u> There are expected improvements for goods movement through improved traffic flow and reduced congestion. More vehicles in HOV or HOT lanes will improve traffic flow for trucks.

	Improve Safety	Reduce Congestion	Restore/Maintain Existing Infrastructure	Improve Accessibility	Improve Goods Movement
Strategy Package 3 Fix Key Bottlenecks plus HOV Lanes	Meets	Meets	Meets	Meets	Meets

Potential natural impacts include expanded crossings at multiple stream tributaries and at the Blue River. Potential noise impacts may exist. The potential for human environmental impacts exist since the study area is scattered with churches, parks, other community facilities, and low income and/or minority populations near the existing corridor. The improvements to the Benton and Jackson curves would be a key location for right of way concerns. Cultural resource impacts may occur in the downtown loop with a high concentration of historic districts and buildings on, or eligible for, the National Register of Historic Places.

There are engineering issues associated with Package 3 related to narrow right of way, steep side slopes, and stormwater drainage at key points. Construction activities to rebuild I-70 will create traffic delays which could be completed by reducing lanes. Fixing the bottlenecks would provide an improved traffic flow through the previous choke points; however, the downstream impact will be evaluated to determine if other issues or bottlenecks result.

Package 3 could be carried forward as a stand alone strategy or elements of Package 3 could be included in an overall strategy.

Initial Strategy Package 4: Fix Key Bottlenecks, HOV Lanes, Unique Design Features (Tunnel)

This package includes everything from Package 3 in addition to incorporating a new alignment of I-70 and unique features. The "unique features" refer to use of a tunnel, the construction of wider bridges in at least three locations to implement the community bridges concept, support for the implementation of commuter rail on one or both of the two existing rail corridors that operate in the I-70 corridor, and supporting

the operation of bus rapid transit on U.S. 40 and other parallel roadways. Package 4 originates from the I-70 MIS.

Package 4 includes activities such as rebuilding I-70 on a new alignment in a tunnel from the Central Business District Loop north leg to the upgraded 22nd/23rd Street interchange at the Benton curve (express lanes in a tunnel), adding I-70 community bridges, integrating the Smart Moves Regional Transit Vision, and adding bus rapid transit on U.S. 40 and other east/west arterial routes.

Package 4 will address the purpose and need goals as follows:

- <u>Improve safety</u> There are safety improvements expected as the general purpose lane traffic flow is improved through some traffic using the HOV lane and the proposed tunnel resulting in more efficient traffic flow. Fixing the key bottlenecks would address several locations with crash rates higher than the statewide average including improvements to the Benton and Jackson curves. Potential safety issues related to a tunnel (emergency response, limited access) would need to be addressed.
- <u>Reduce congestion</u> There are expected congestion reductions as some existing traffic will divert from the general purpose lanes to the HOV lanes. The tunnel would also provide additional capacity from the downtown loop to 22nd/23rd Street.
- Restore/maintain the existing infrastructure There are improvements expected as this package will rehabilitate and/or rebuild the entire roadway in the existing corridor to renew the long-term pavement and road base conditions.
- <u>Improve accessibility</u> There are expected improvements to accessibility across I-70 or the downtown loop freeway through the provision of community bridges. Bus transit could operate in the HOV lanes dependent on the needs of the particular transit route.
- Improve goods movement There are expected improvements for goods movement through improved traffic flow and reduced congestion. Moving vehicles to HOV or HOT lanes or to an additional tunnel would improve traffic flow for trucks.

	Improve Safety	Reduce Congestion	Restore/Maintain Existing Infrastructure	Improve Accessibility	Improve Goods Movement
Strategy Package 4 Fix Key Bottlenecks, HOV Lanes, Unique Design Features (Tunnel)	Meets	Meets	Meets	Meets	Meets

Potential natural impacts include expanded crossings at multiple stream tributaries and at the Blue River. The potential for human environmental impacts exist since the study area is scattered with churches, parks, other community facilities, and low income and/or minority populations near the existing corridor. In addition, noise impacts may be a concern. Cultural resource impacts may occur in the downtown loop with a high concentration of historic districts and buildings on, or eligible for, the National Register of Historic Places. The improvements through the Benton and Jackson curves and the proposed tunnel location would be key locations for right of way concerns.

There are engineering issues associated with Package 4 related to narrow right of way, steep side slopes, and storm water drainage at key points. Construction activities to rebuild I-70 will create traffic delays which could be completed by reducing lanes. Fixing the bottlenecks would provide an improved traffic flow through the previous choke points; however, the downstream impact will be evaluated to determine if other issues or bottlenecks result.

The tunnel concept in this strategy has some engineering issues of its own. The issues related to the tunnel include air ventilation, vibration during construction, emergency response in the tunnel, the proximity of the tunnel to the water table, and the required interchange improvements in the northeast corner of the downtown loop.

The I-70 MIS estimated the cost of the tunnel at \$375 million. Due to sharp increases in construction costs and inflation, recent estimates by the Study Team are in the area of \$960 million for the tunnel.

The community bridges, implementing the Smart Moves Regional Transit Vision, and bus rapid transit on parallel routes are elements which could be carried forward in combination with other concepts. The commuter rail on existing rail lines portion of this strategy package is out of the existing study area, its affects on the corridor should be considered.

The community bridges and improved transit options are elements that could be included in other packages. The tunnel element introduces a number of engineering issues at a relatively expensive cost. The tunnel concept will not be carried forward.

Initial Strategy Package 5: Add General Lane Capacity

Package 5 originates from the I-70 MIS and is focused on improvements to the automobile/truck travel modes by adding general-purpose lanes and eliminating deficient horizontal and vertical curves. This package includes everything from Package 1 in addition to widening I-70 to eight lanes from the Central Business District Loop to I-470 and integrating the Smart Moves Regional Transit Vision. Package 5 includes activities such as:

- Rebuilding some interchanges along I-70 to accommodate additional lanes
- Using collector distributor roads at key locations
- Providing for bus on shoulders
- Upgrading the I-435 interchange as noted in the I-435 MIS
- Consolidating downtown loop access on north and east legs and improve lane balance in the downtown loop
- Building major downtown loop operational improvements and upgrading the downtown loop's southwest corner (I-35/I-670 interchange ramps)
- Adding I-70 to Bruce R. Watkins (U.S. 71) directional ramps
- Improving the Benton and Jackson curves

Package 5 will address the purpose and need goals as follows:

- Improve safety There are safety improvements expected as the general purpose lane traffic flow is improved through the addition of general purpose lanes. Improving the Benton and Jackson curves and addressing other key locations with crash rates substantially above the statewide average will also address safety concerns.
- <u>Reduce congestion</u> There are expected congestion reductions with the addition of general purpose lanes.
- Restore/maintain the existing infrastructure There are improvements expected as this package will rehabilitate and/or rebuild the entire roadway in the existing corridor to renew the long-term pavement and road base conditions.
- <u>Improve accessibility</u> There are improvements expected to improve accessibility across I-70 or the downtown loop freeway through pedestrian and non-motorized improvements made during interchange replacements. Bus on shoulder is included to improve transit accessibility and mobility.

• <u>Improve goods movement</u> – There are expected improvements for goods movement through improved traffic flow and reduced congestion.

	Improve Safety	Reduce Congestion	Restore/Maintain Existing Infrastructure	Improve Accessibility	Improve Goods Movement
Strategy Package 5 Add General Lane Capacity	Meets	Meets	Meets	Meets	Meets

Potential natural impacts include expanded crossings at multiple stream tributaries and at the Blue River. The study area is scattered with churches, parks, and other community facilities near the existing corridor. Another human environment concern is the low income and/or minority neighborhood impacts that are located adjacent to the corridor. The improving of the Benton and Jackson curves would be a key location for right of way concerns. Additional social impacts include the potential of noise impacts. Cultural resource impacts may occur in the downtown loop with a high concentration of historic districts and buildings on, or eligible for, the National Register of Historic Places.

There are engineering issues associated with Package 5 related to narrow right of way, steep side slopes, and stormwater drainage at key points. Construction activities could create some temporary traffic delays. The widening of I-70 to eight lanes could occur for all or part of the study area corridor. This package could be carried forward as a stand alone package.

Initial Strategy Package 6: Capacity Increases (HOV Lanes) plus Transit Improvements

Package 6 originates from the I-70 MIS. This package is focused on increasing the number of persons served by the highway facility. This package includes everything from Package 5 in addition to applying HOV Lanes (toll optional) to the new lanes. Package 6 also includes activities such as adding I-70 community bridges, integrating the Smart Moves Regional Transit Vision, adding bus rapid transit on parallel arterial routes, supporting transit centers, and supporting commuter rail. Package 3 and Package 6 are similar in their major elements (as were Package 2B and Package 3B of the MIS), but includes more transit and accessibility options.

Package 6 will address the purpose and need goals as follows:

- <u>Improve safety</u> There are safety improvements expected as the general purpose lane traffic flow is improved through some traffic using the HOV lanes resulting in more efficient traffic flow. The Package would address several locations with crash rates higher than the statewide average including improvements to the Benton and Jackson curves.
- <u>Reduce congestion</u> There are expected congestion reductions as some existing traffic will divert from the general purpose lanes to the HOV lanes.
- Restore/maintain the existing infrastructure There are improvements expected as this package will reconstruct the entire roadway in the existing corridor to renew the long-term pavement and road base condition.
- <u>Improve accessibility</u> There are expected accessibility improvements across I-70 or the downtown loop freeway through the provision of community bridges.
- <u>Improve goods movement</u> There are expected improvements for goods movement through improved traffic flow and reduced congestion. More vehicles in HOV or HOT lanes will improve traffic flow for trucks.

	Improve Safety	Reduce Congestion	Restore/Mainta in Existing Infrastructure	Improve Accessibility	Improve Goods Movement
Strategy Package 6 Add HOV and Transit	Meets	Meets	Meets	Meets	Meets

Potential natural impacts include expanded crossings at multiple stream tributaries and at the Blue River. The potential for human environmental impacts exist since the study area is scattered with churches, parks, other community facilities, and low income and/or minority populations near the existing corridor. Cultural resource impacts may occur in the downtown loop with a high concentration of historic districts and buildings on, or eligible for, the National Register of Historic Places. Improving the Benton and Jackson curves would be a key location for right of way concerns.

There are engineering issues associated with Package 6 related to narrow right of way, steep side slopes, and stormwater drainage at key points. Construction activities could create some temporary traffic delays.

Package 6 could be carried forward as a stand alone strategy. The community bridges and integrating Smart Moves Regional Transit Vision are concept elements which could be carried forward in combination with other concepts. These concepts have positive impacts which can be used in combination with other concepts. Increasing bus transit

concepts could be included in all strategies throughout the corridor. The commuter rail element of Package 6 uses existing rail lines outside the study area, its affects on the corridor should be considered separately.

Initial Strategy Package 7: Fix Key Bottlenecks plus Transportation Improvement Corridor

Package 7, the recommended strategy of the I-70 MIS, consists of a combination certain parts of Packages 1 through 6.

The MIS recommended reconstructing I-70 to six lanes with provisions for a 48-foot future "transportation improvement corridor" from the Central Business District Loop to the U.S. 40/Blue Ridge Boulevard interchange. Typical applications could include HOV lanes, HOT lanes, reversible lanes, bus only lanes, or truck only lanes. Between I-435 and I-470, the MIS recommended total rebuild of I-70 to eight lanes.

Package 7 also includes activities such as:

- Pavement reconstruction for the entire length of the I-70 corridor
- Improvements to the Benton and Jackson curves
- Improving lane balance in the downtown loop and consolidate downtown loop interchanges to one access point on the north and east sides to improve traffic flow and safety
- Reconstructing all interchanges throughout the corridor to include the transportation improvement corridor
- Upgrading the I-435 and I-470 interchanges
- The addition of park and ride facilities
- Bus on shoulder provisions
- Support for Operation Green Light
- Expanded freeway patrols
- Integrating the Smart Moves Regional Transit Vision

Package 7 will address the purpose and need goals as follows:

• <u>Improve safety</u> – There are safety improvements expected as the general purpose lane traffic flow is improved with some traffic diverting to the Transportation Improvement Corridor. Fixing the key bottlenecks would address several locations with crash rates higher than the statewide average including improvements to the Benton and Jackson curves.

- <u>Reduce congestion</u> There are expected congestion reductions with the addition of Transportation Improvement Corridor. The fixed bottlenecks would also result in a reduction of congestion at key points.
- Restore/maintain the existing infrastructure There are improvements expected as this package will reconstruct the entire roadway in the existing corridor to renew the long-term pavement and road base conditions.
- <u>Improve accessibility</u> There are expected improvements to accessibility across I-70 or the downtown loop freeway through the provision of community bridges. Bus transit could operate in the Transportation Improvement Corridor to improve transit accessibility and mobility.
- <u>Improve goods movement</u> There are expected improvements for goods movement through improved traffic flow and reduced congestion. If the Transportation Improvement Corridor successfully reduces congestion in the general purpose lanes, flow for trucks will improve.

	Improve Safety	Reduce Congestion	Restore/Maintain Existing Infrastructure	Improve Accessibility	Improve Goods Movement
Strategy Package 7 Fix Key Bottlenecks plus a Specialty Corridor	Meets	Meets	Meets	Meets	Meets

Potential natural impacts include expanded crossings at multiple stream tributaries and at the Blue River. Noise is also a potential impact with this strategy. The potential for human environmental impacts exist since the study area is scattered with churches, parks, other community facilities, and low income and/or minority populations near the existing corridor. Cultural resource impacts may occur in the downtown loop with a high concentration of historic districts and buildings on, or eligible for, the National Register of Historic Places. The improvements to of the Benton and Jackson curves would be a key location for right of way concerns.

There are engineering issues associated with Package 7 related to narrow right of way, steep side slopes, and stormwater drainage at key points. Construction activities could create some temporary traffic delays.

Package 7 can be carried forward with considerations of HOV/HOT/BRT lanes, reversible lanes, or commuter express lanes within the proposed improvement corridor.

Initial Strategy Package 8 - TSM/TDM plus BRT Solutions Alternative

Package 8 is focused on a combination of improvement concepts specifically aimed at reducing vehicle emissions and automobile use in the I-70 corridor. This package includes Bus Rapid Transit (BRT) and HOV in a converted general traffic lane, emphasizing bicycle and pedestrian improvements, community bridges, and encouraging TSM and TDM activities.

TSM programs identified in MARC's Congestion Management System toolbox includes traffic signal coordination, enhanced freeway incident detection and management, ramp metering, advance traveler information systems, and highway information systems. Two elements – enhanced freeway incident detection and management and advance traveler information systems are already in place along I-70. TDM concepts in MARC's toolbox include alternate work hours, telecommuting, ridesharing, and preferential carpool parking. These types of measures could also be implemented as part of the No-Build Strategy or other Build Strategies.

Package 8 will address the purpose and need goals as follows:

- <u>Improve safety</u> There are few safety improvements with the TSM/TDM plus BRT solution strategy as it does not address key locations where crash rates exceed statewide averages or locations with geometric issues such as the speed reduced curves at Jackson Avenue and Benton Boulevard.
- <u>Reduce congestion</u> There are little to no congestion reductions with the TSM/TDM plus BRT solution strategy with the conversion of general purpose lanes to a BRT/HOV lane.
- Restore/maintain the existing infrastructure There are no improvements expected in this package that will renew the long-term pavement and road base conditions.
- <u>Improve accessibility</u> There are expected improvements to accessibility across I-70 or the downtown loop freeway through the provision of community bridges and better transit options.
- <u>Improve goods movement</u> There are no expected improvements for goods movement.

	Improve Safety	Reduce Congestion	Restore/Maintain Existing Infrastructure	Improve Accessibility	Improve Goods Movement
Strategy Package TSM/TDM plus BRT Solutions Strategy	Does Not Meet	Does Not Meet	Does Not Meet	Meets	Does Not Meet

There are no major adverse impacts to the natural, human, or cultural environments. Air quality at point locations along the corridor could be a concern due to emissions from heavily congested traffic.

Package 8 by itself will not do enough to address the purpose and need to be a stand alone strategy for the I-70 FTEIS. These concepts have positive impacts which can be used in combination with other concepts. Bicycle and pedestrian improvements (community bridges), TSM, and TDM concepts could be included in all strategy packages in the corridor.

Initial Strategy Package 9 - Unique Capacity Designs Alternative

Package 9 is focused on unique design alternatives to expand I-70 with either general purpose lanes or specialty lanes, such as HOV, HOT, Reversible, Bus Rapid Transit, or Truck Only Lanes, while minimizing new right of way needs. Effectively the package expands the roadway vertically instead of horizontally. This package includes the elevated/stacked highway lanes design option and the one-way downtown loop. Elevated and stacked lanes may be included on the existing alignment or in sections with limited right of way. Stacked lanes may be suited in the urban section of the corridor, especially through the Benton and Jackson curves where right of way may be an issue.

The one-way loop option is a one directional loop around downtown using the existing downtown loop. Downtown access and an exact plan for the conversion from two-way traffic flow to one-way traffic flow would need to be developed. The entire downtown loop traffic flow would travel in a counter clockwise direction with the north side of the downtown loop traveling west; west side traffic would travel south; south side traffic would travel east; and east side traffic would travel north. The Northland Downtown MIS recommendation included that the existing two-way traffic operation of the downtown freeway loop is the most efficient configuration.

Package 9 will address the purpose and need goals as follows:

• Improve safety – There are safety improvements expected with the addition of specialty lanes or general purpose lanes in a stacked manner resulting in more efficient traffic flow. However, the improvements would not fix some of the key horizontal curves in the corridor and the stacked lanes would introduce many new transition and possible weave points between ramps to upper and lower lanes.

- <u>Reduce congestion</u> There are expected congestion reductions from additional capacity in the form of stacked special use lanes or general purpose lanes.
- Restore/maintain the existing infrastructure There are improvements expected as this package will rehabilitate and/or rebuild the entire roadway in the existing corridor to renew the long-term pavement and road base condition.
- <u>Improve accessibility</u> There is little or no improvement expected to improve accessibility across I-70 or the downtown loop freeway. Stacked lanes would make it more difficult to provide enhanced crossings of the corridor.
- <u>Improve goods movement</u> There are expected improvements for goods movement through improved traffic flow and reduced congestion.

	Improve Safety	Reduce Congestion	Restore/Maintain Existing Infrastructure	Improve Accessibility	Improve Goods Movement
Strategy Package 9 Unique Capacity Designs	Meets	Meets	Meets	Worse than Existing	Meets

Potential natural impacts include expanded crossings at multiple stream tributaries and at the Blue River. With stacked lanes, expansion at these crossings could be minimized. The study area is scattered with potential social impacts to churches, parks, other community facilities, and low income and/or minority populations near the existing corridor. Additional human environmental impacts may include increased noise and visual impacts. Cultural resource impacts may occur in the downtown loop with a high concentration of historic districts and buildings on, or eligible for, the National Register of Historic Places. Stacked lanes may have right of way impacts at major interchanges where right of way is needed to provide higher bridge crossings over the stacked freeway or crossings under the stacked freeway.

There are engineering issues associated with the elevated or stacked lanes concept. Elevated or stacked lanes would require bridge and interchange configuration revisions. Current overpasses would need modifications. The number of access points along the corridor could be reduced.

The unique capacity designs will not be carried forward as they do not meet all the goals of the Purpose and Need. The one-way loop would require all bridges to be rebuilt without center supports to allow lane changes. The one-way loop also did not receive support when analyzed as part of the downtown loop study. The elevated or

stacked lanes would require extensive interchange revisions. Elevated or stacked lanes would also be expected to cost substantially more than other potential solutions.

Initial Strategy Package 10 – Rail Transit Alternative

Package 10 is focused on rail transit alternatives within the I-70 corridor right of way. This package includes an exclusive rail corridor which may be commuter rail or light rail and enhanced park and ride facilities. Rail within the corridor could either run the length of the corridor from I-470 to the downtown loop or connect with key rail lines that run near to or cross I-70 and only run along I-70 for part of the corridor. There would be no expansion of general purpose lanes or major bottleneck fixes as part of this alternative although the speed reduced curves at Jackson Avenue and Benton Boulevard would need improvement to allow for rail lines. The existing I-70 would be rebuilt.

Light Rail Transit could operate in the I-70 right of way in a dedicated corridor on one side of the roadway or in the median. Light rail would have a limited number of stops and provide travel time savings during peak congestion periods. Light rail would need to be coordinated with other regional light rail initiatives.

Commuter rail transit generally uses existing rail lines to provide morning and afternoon service during the heaviest congestion periods and carries both freight and passenger cars on a daily basis. Because of the shared nature of the rail line between freight and commuter service, commuter rail would only run during the morning and afternoon peak commuter periods. There is an opportunity to use a combination of existing and new rail lines. A new commuter rail connection between the existing Rock Island line at Blue River and the KCT line near 18th Street is a possible combination. This alignment could use Union Station as a terminus point. However, the growing demand for freight rail (projected to increase 40 to 60 percent nationally in the next 20 years) could lead to rail congestion locally without investment in additional tracks. This may limit the opportunity for commuter rail to share the freight rail tracks.

Package 10 will address the purpose and need goals as follows:

- <u>Improve safety</u> There would be minor safety improvements to the extent that traffic flow is improved by shifting trips to rail. However, all of the areas with crash rates that are higher than the statewide average would not be addressed with improvements.
- Reduce congestion There are improvements expected as the traffic flow is improved by travelers changing their mode choice to transit. However, Mid-

America Regional Council's I-70 Transit Alternatives Analysis Study did not show ridership that would lead to a substantial reduction in automobile use in the corridor.

- Restore/maintain the existing infrastructure There are no improvements expected as this package will rehabilitate and/or rebuild the entire roadway in the existing corridor to renew the long-term pavement and road base condition.
- <u>Improve accessibility</u> There is little or no improvement expected to improve accessibility across I-70 or the downtown loop freeway. However, neighborhoods near the freeway would have new transit options.
- <u>Improve goods movement</u> There are minimal improvements expected for goods movement through improved traffic flow.

	Improve Safety	Reduce Congestion	Restore/Maintain Existing Infrastructure	Improve Accessibility	Improve Goods Movement
Strategy Package 10	Does Not	Does Not	Does Not	Mooto	Does Not
Rail Transit	Meet	Meet	Meet	Meets	Meet

With an increase in the right of way for rail, the potential natural impacts include expanded crossings at multiple stream tributaries and at the Blue River. The potential for human environmental impacts exist since the study area is scattered with churches, parks, other community facilities, and low income and/or minority populations near the existing corridor. Cultural resource impacts may occur in the downtown loop with a higher concentration of historic districts and buildings on, or eligible for, the National Register of Historic Places. Additional park and ride lots to support rail alternatives would also have right of way impacts in eastern parts of the study area.

The Jackson and Benton curves limit the practicality of light rail in the I-70 right of way. Light rail between the vehicle lanes would also create station access challenges for local residents as they would need to walk halfway across freeway bridge and take stairs or some other means of getting up to or down from a station stop in the middle of the right of way. A light rail route that serves eastern Jackson County may be more practical on an alignment off of the I-70 right of way. The Smart Moves Regional Transit Vision, as well as the current Kansas City, Missouri Mayor's regional transit plan, identifies commuter rail as the preferred option for eastern Jackson County.

The MIS did not recommend light rail for further consideration for a number of reasons. Large up-front capital investment makes this concept difficult to phase over time. Residents in the MARC region have not a shown willingness to provide local funding

commitments for capital and operating costs of light rail, most recently with the November 4, 2008 light rail ballot initiative defeat. In light rail plans proposed previously, other corridors in the MARC region have been identified as higher priority for light rail, not I-70. This concept shows the highest potential of all transit concepts for negative effects, primarily due to the need for stations and parking areas in currently developed areas. Existing and anticipated development densities throughout the corridor are not consistent with patterns needed to support the rail concept and most jurisdictions do not have land use plans in place to promote dense transit oriented development.

Initial Strategy Package 11 – Freight Movement Alternative

Package 11 is focused on freight movement alternatives to improve I-70 as a freight corridor. This package includes exclusive truck only lanes on the inside of the general purpose lanes. The existing freeway would need to be rebuilt and widened to accommodate truck only lanes. If implemented, truck only lanes would be best suited for the suburban section of the I-70 corridor (I-470 to I-435). They could provide access to the I-435 beltway without directing through trucks into the core of the city. The separation of truck only lanes from the general purpose lanes could be accomplished with a physical barrier or a buffer area delineated with pavement markings. The footprint of a truck only lane would limit the practicality through the downtown loop, although a designated truck route and signage would enhance the truck flows through the downtown loop.

Package 11 will address the purpose and need goals as follows:

- <u>Improve safety</u> There are safety improvements expected as the interaction between trucks and passenger vehicles are separated and improve traffic flow.
- Reduce congestion Truck only lanes do not address peak hour commuter congestion well. There are some improvements expected as the traffic flow is improved through the separation of generally slower moving and accelerating trucks from the general traffic flow. However, designating the I-70 corridor as a major truck route with truck only lanes could draw more through truck trips to the corridor, potentially causing additional congestion if truck only lanes are not barrier separated.
- Restore/maintain the existing infrastructure There are improvements expected as this package will rehabilitate and/or rebuild the entire roadway in the existing corridor to renew the long-term pavement and road base condition.
- <u>Improve accessibility</u> Truck only lanes would not be expected to improve accessibility across I-70 or the downtown loop freeway.

• <u>Improve goods movement</u> – Dedicated lanes for trucks could substantially enhance the movement of goods on the corridor.

	Improve Safety	Reduce Congestion	Restore/Maintain Existing Infrastructure	Improve Accessibility	Improve Goods Movement
Strategy Package 11 Freight Movement	Meets	Does Not Meet	Meets	Does Not Meet	Meets

Potential natural impacts include expanded crossings at multiple stream tributaries and at the Blue River. The potential for human environmental impacts exist since the study area is scattered with churches, parks, other community facilities, and low income and/or minority populations near the existing corridor. Cultural resource impacts may occur in the downtown loop with a high concentration of historic districts and buildings on or eligible for the National Register of Historic Places. Adding one truck only lane in each direction may be ineffective; as a result truck only lanes may necessitate a wider footprint than other alternatives. Unlike I-70 across the state, there are few parts of the corridor with a wide median section to accommodate truck only lanes.

There are engineering issues associated with the truck only lanes concept related to narrow right of way, steep side slopes, and stormwater drainage at key points. Construction activities could create some temporary traffic delays.

Truck origins and destinations are scattered throughout the region which limits the practicality of a truck only lane on I-70 in the Kansas City metropolitan area. Directing through trucks into the heart of the city is not consistent with multiple, scattered origin and destination points. The statewide truck only lanes corridor will transition into auto and truck shared use lanes east of I-470 as proposed in the statewide study. Trucks passing through the region also have a variety of routes available to them. The I-70 Statewide Supplemental Environmental Impact Statement (SEIS) is currently recommending that truck only lanes be phased out east of I-470, which is the eastern limit of this study. As a result, the truck only lane concept will not be carried forward for this FTEIS.

Initial Strategy Package 12 – Collector Distributor Roads Alternative

Package 12 is focused on collector distributor (C/D) roads to improve the I-70 corridor. This package includes constructing new capacity in the form of a parallel collector distributor roadway system which will provide local access to cross streets and reduce the number of access points on I-70. This package extends from the downtown loop to

I-470. The full CD system would require two additional lanes in each direction at most locations.

With a collector distributor system, there would be designated express lanes. The express lanes would not have direct access to the cross streets that I-70 currently does, rather cross street access would be to/from the collector distributor roads. The access between the express lanes and the collector distributor lanes would be fewer than existing I-70, likely once every two to four interchanges. The collector distributor roads would provide the access to the cross streets. The cross street access with the collector distributor road may be as an intersection or an interchange.

Package 12 will address the purpose and need goals as follows:

- Improve safety There are safety improvements expected as the interaction between entering and exiting vehicles on the express lanes will be reduced. As part of implementing the collector-distributor system, many areas along I-70 with above statewide average crash rates would be addressed. Much of the merging, diverging and weaving movements would take place on the lower speed collector distributor roadways.
- Reduce congestion There are improvements expected to the traffic flow on the express lanes due to the reduced number of merge points. Additional lanes as part of the collector-distributor system will also improve flow.
- Restore/maintain the existing infrastructure There are improvements expected as this package will rehabilitate and/or rebuild the entire roadway in the existing corridor to renew the long-term pavement and road base condition.
- <u>Improve accessibility</u> Collector-distributor roads would widen the crossing of the freeway while offering few opportunities to improve flexibility.
- <u>Improve goods movement</u> There are improvements expected for goods movement through the improved traffic flow in the express lanes.

	Improve Safety	Reduce Congestion	Restore/Maintain Existing Infrastructure	Improve Accessibility	Improve Goods Movement
Strategy Package 12 Collector Distributor Roads	Meets	Meets	Meets	Meets	Meets

Potential natural impacts include expanded crossings at multiple stream tributaries and at the Blue River. The potential for human environmental impacts exist since the study area is scattered with churches, parks, other community facilities, and low income

and/or minority populations near the existing corridor as well as noise concerns. Cultural resource impacts may occur in the downtown loop with a high concentration of historic districts and buildings on or eligible for the National Register of Historic Places. A collector-distributor system, while efficient at moving traffic would likely have one of the widest footprints of any strategy due to the separation and transitions between express and collector lanes.

There are engineering issues associated with the collector distributor roads concept related to narrow right of way, steep side slopes, retaining walls, and stormwater drainage at key points. Construction activities could create some temporary traffic delays.

Package 12 will not be carried forward. Two other packages are being carried forward which can incorporate the CD road concept at key locations. (Package 2 and Package 5) Package 2 can incorporate a CD system at specific locations to improve a bottleneck or address a safety issue. Package 5 can incorporate the CD system at key locations if traffic modeling indicates that more than one lane of capacity in each direction is not adequate.

Initial Strategy Package 13 – Privatization Alternative

Package 13 is focused on involving the private sector in developing and funding alternatives to improve the I-70 corridor. This package includes selling or leasing I-70 to a third party which will convert I-70 into a toll road and use the collected toll revenue to build, operate, and maintain the roadway. In order for this alternative to be feasible, the private sector needs a revenue stream from the project. This could include HOT lanes or some form of a "shadow" toll paid by the public sector based on usage of the facility. Congestion pricing is also a tolling method to finance and build the additional lanes where the toll price would increase based on the demand to use the HOT lane or even time of day toll increases. Either the public or private sector could implement some form of congestion pricing.

It is difficult to evaluate privatization against the purpose and need without defining the types of improvements the private sector would be involved in. Assuming the private sector will be involved in a capacity expansion in some form, along with reconstruction of the existing roadway, in exchange for some form of revenue stream; the privatization strategy package will address the purpose and need goals as follows:

• <u>Improve safety</u> – There are safety improvements expected with the addition of specialty lanes, most likely HOT lanes, resulting in more efficient traffic flow.

However, safety will only be enhanced to the extent that the program of improvements funded by the private sector addresses key locations with higher than statewide average crash rates.

- Reduce congestion There are expected congestion reductions from additional capacity in the form of special use lanes or general purpose lanes provided through the private sector.
- Restore/maintain the existing infrastructure There are some improvements expected as this package would only be applicable for new lanes under current Missouri/federal law unless this is changed to allow tolling on existing lanes. As a result, reconstructing the existing roadway to renew the long-term pavement and road base condition would still be a public expense.
- <u>Improve accessibility</u> There is little or no improvement expected to improve accessibility across I-70 or the downtown loop freeway as the private sector is less likely to pay for amenities that could not be captured by the roadway toll or other financial return on their investment.
- <u>Improve goods movement</u> There are expected improvements for goods movement through improved traffic flow and reduced congestion.

	Improve Safety	Reduce Congestion	Restore/Maintain Existing Infrastructure	Improve Accessibility	Improve Goods Movement
Strategy Package 13 Privatization	Does Not Meet	Meets	Meets	Does Not Meet	Meets

Potential natural impacts include expanded crossings at multiple stream tributaries and at the Blue River. The potential for human environmental impacts exist since the study area is scattered with churches, parks, other community facilities, and low income and/or minority populations near the existing corridor as well as noise concerns. Cultural resource impacts may occur in the downtown loop with a high concentration of historic districts and buildings on or eligible for the National Register of Historic Places. Overall impacts would likely be similar to other strategy packages that expand capacity.

There are engineering issues associated with any widening of the existing corridor related to narrow right of way, steep side slopes, retaining walls, and stormwater drainage at key points. Construction activities could create some temporary traffic delays.

Current transportation funding sources such as the fuel tax, may not be sufficient to completely fund large scale transportation infrastructure investments such as improving I-70. Federal law currently dictates tolls can only be placed on new lanes. An alternative financing approach involving the private sector may be an important part of the funding package for the recommended solution, but a purely private solution is unlikely for I-70 and would struggle to address all elements of the purpose and need.

Initial Strategy Package 14 – Bus Transit Focus Alternative

Package 14 is focused on bus transit alternatives in the I-70 corridor. This package includes an exclusive corridor for bus rapid transit service, enhancing park and ride facilities, integrating the Smart Moves Regional Transit Regional Vision, and enhancing transit applications such as advance traveler information systems. Bus only lanes for bus rapid transit would be best suited between I-435 and the downtown loop, but certainly capable of extending through the entire length of the study area.

Bus rapid transit would operate in an exclusive corridor with limited stops. The special corridor would remove the buses from the congestion and slow downs in the general purpose lanes and have a travel time advantage over personal automobiles. In lieu of a dedicated corridor, some metropolitan areas are allowing buses to drive on shoulder during congested periods of the day. This accomplishes travel time benefits for bus transit which may attract more riders. The Smart Moves Regional Transit Vision calls for a fixed route bus service along I-70; however, does not identify if that is in an exclusive BRT lane or in the general traffic flow.

Package 14 will address the purpose and need goals as follows:

- Improve safety There are safety improvements expected as the traffic flow is improved through the corridor. However, unless coupled with other improvements, this package would not address key safety enhancements in the corridor including speed reduced curves at Jackson Avenue and Benton Boulevard and above average crash locations.
- Reduce congestion Some improvement would be expected as the traffic flow
 is improved by travelers changing their mode choice to transit. In an
 atmosphere of higher fuel prices, commuters may seek high quality consistent
 transit service as an alternative to their cars. However, there would need to be
 a widespread shift to have a substantial effect on congestion, e.g. full busses
 with five minute headways.

- Restore/maintain the existing infrastructure There are no improvements expected, as this package will not rehabilitate and/or rebuild the entire roadway in the existing corridor to renew the long-term pavement and road base condition.
- <u>Improve accessibility</u> There are expected improvements to accessibility across I-70 or the downtown loop freeway through the provision of community bridges. This option would also increase transit accessibility.
- <u>Improve goods movement</u> There are few improvements expected for goods movement through improved traffic flow.

	Improve Safety	Reduce Congestion	Restore/Maintain Existing Infrastructure	Improve Accessibility	Improve Goods Movement
Strategy Package 14	Does Not	Does Not	Does Not	Meets	Does Not
Bus Transit	Meet	Meet	Meet		Meet

Potential natural impacts include expanded crossings at multiple stream tributaries and at the Blue River. The potential for human environmental impacts exist since the study area is scattered with churches, parks, other community facilities, and low income and/or minority populations near the existing corridor. Cultural resource impacts may occur in the downtown loop with a high concentration of historic districts and buildings on or eligible for the National Register of Historic Places.

There are engineering issues related to narrow right of way, steep side slopes, retaining walls, and storm water drainage at key points. Construction activities could create some temporary traffic delays.

The funding for bus transit service beyond the Kansas City, Missouri city limits is provided by the local community receiving the service. In late 2008, Independence chose to cut some bus transit service and Blue Springs has maintained current service levels despite buses running at capacity.

Increased bus transit service alone will not have a large enough impact to be a stand alone strategy for the I-70 FTEIS. These concepts have positive impacts which can be used in combination with other concepts. Bus transit concepts, such as bus on shoulder during periods of congestion, could be included in all strategies throughout the corridor. The MIS indentified dedicated lanes solely for bus operations as not economically justified based on low cost effectiveness.

Initial Strategy Package 15 – Reduce Capacity Alternative

Package 15 is focused on reducing the number of general purpose lanes and converting the interchanges to intersections. Effectively I-70, as it is currently known, would be reduced to a parkway and commuters would need to spread out to other roads or other modes of transportation. I-70 would require re-designation along other interstate facilities to maintain a connection with I-70 in Kansas. The reduce capacity concept is designed to provide parkway elements to the roadway including a green median with trees. This package includes bus service improvements, TSM, and TDM elements. This package would be considered from I-435 to the downtown loop and potentially for the north side of the loop. Consideration must be given to traffic diversion and the associated impacts on alternative routes with this package.

Package 15 will address the purpose and need goals as follows:

- <u>Improve safety</u> There are no overall safety improvements expected. Intersections typically have higher crash rates than grade separated interchanges although speed is lower.
- Reduce congestion There is an expected increase in congestion with the lane reductions and lower speed limits. This would occur both on the I-70 parkway and on parallel routes.
- Restore/maintain the existing infrastructure There is no improvement expected as this package would not reconstruct the existing roadway to renew the long-term condition.
- <u>Improve accessibility</u> There are expected improvements to accessibility across I-70 or the downtown loop freeway from a shorter distance to cross the new parkway and pedestrian signals at most cross streets.
- <u>Improve goods movement</u> There are expected decreases in goods movement through the increased congestion and crash rates.

	Improve Safety	Reduce Congestion	Restore/Maintain Existing Infrastructure	Improve Accessibility	Improve Goods Movement
Strategy Package 15 Reduce Capacity	Worse than Existing	Worse than Existing	Does Not Meet	Meets	Worse than Existing

No adverse impacts are expected to cultural resources or the natural or human environments so long as the parkway fits in the existing I-70 right of way. Air quality would be potentially worsened through more idling and stop and go traffic through

intersections. There are engineering issues associated with converting the interchanges to signalized intersections in the parkway concept.

The parkway concept would be most effective in conjunction with wide spread regional transit or alternative transportation development strategy. These strategies are not currently occurring in the Kansas City metropolitan area. The parkway does not address the purpose and need as a stand alone strategy.

Other Alternative Considerations

The Study Team did not put together a complete package of alternative upgrades to regional/parallel roads other than I-70. Upgrades to other key roads such as U.S. 24, U.S. 40, MO-78, and MO-350 could help alleviate congestion along I-70. Operation Green Light is one potential upgrade to parallel routes that is included and discussed for several of the strategy packages evaluated. It would be advantageous for all packages moved forward for further evaluation to incorporate the concept of upgrades to parallel routes, particularly low cost upgrades. However, focusing on a full package of improvements to parallel routes, including those requiring new right of way, is beyond the scope of this project and fails to address many of the safety, infrastructure restoration, and accessibility needs.

Input Into Alternative Concept Evaluation from Public Open Houses and Community Coffees

This section discusses the key ideas the Study Team heard with regards to evaluating alternative concepts at a series of two open house meetings and two community coffees held in September 2008. At the open houses and community coffees, members of the public were invited to comment on improvement concepts and the individual elements that make up strategy packages. Strategy packages had not been defined at the time. The open houses were held on weekday evenings while the community coffees were held on Saturday mornings. The Study Team held the meetings/coffees at four different locations spread along the corridor. The meetings and community coffees were formatted as open houses, so participants were welcome to come and go as desired.

The purpose of the open houses and community coffees were to gather stakeholders' input that included four questions (which were included on comment forms):

- What are the problems in the corridor?
- What needs to be fixed and how would you fix it?
- How does the corridor affect your everyday life?
- Other comments?

Over 11,000 newsletters were mailed to I-70 property owners and 308 fliers were mailed to umbrella organizations, agencies, businesses, and public officials inviting them to attend the meetings. Sixty-five residents, business owners, and other area citizens attended the open houses and community coffees.

Summary of Comments

The following points provide a summary of comments received at the open house meetings and community coffees.

What are the problems in the corridor?

- Traffic congestion
- On/off ramps too short
- Access across the north and south leg of the downtown loop
- Benton curve
- One mode available, car. Provide alternative modes (rail, bus, bicycle)
- I-435 Interchange
- Noise and drainage

What needs to be fixed and how would you fix it?

- On/off ramps lengthen and/or reduce the number
- Light rail
- Reversible lanes
- Cap the south leg of loop
- Get rid of north leg of loop
- Interchange improvements
- Transportation Demand Management (TDM)
- Noise walls
- Benton Curve
- No new lanes.
- No ramp metering
- Provide alternative modes
- Bicycle/pedestrian accessibility

Other Comments

- Toll road support
- Light rail support

- Reversible lanes support
- Likes one-way loop
- Support truck only lanes
- Cap the north and south leg of the loop
- No to exclusive bus lanes, tunnel, elevated lanes, reversible lanes
- Noise need noise walls
- HOV lanes or HOT lanes
- Tunnels
- Benton/Jackson curves
- Concern about air quality
- No to tolls
- Transit options
- HOV lanes or HOT lanes
- On/off ramps too short
- Cover north and south leg of loop/better bicycle and pedestrian access
- No to general purpose lanes

A synopsis of the comments show support for fixing bottlenecks (Package 2, parts of Packages 3, 4, and 7), light rail (Package 10), reversible lanes (Packages 6 and 7), cap the north and south legs of the loop (Package 6 and a part of Packages 4, 8, and 14), truck only lanes (Package 11), one-way loop (Package 9), TDM activities (parts of Packages 1, 2, 3, 4, 7, 8, and 15), provide alternative modes (Packages 10, 14, and potentially others), and HOV/HOT lanes (Packages 3, 4, 6, 7, and 13).

The Study Team also heard what not to do including bus only lanes (part of Package 14), tunnel (Package 4), elevated lanes (Package 9), and reversible lanes (Packages 6 and 7). The Study Team also heard that they should not implement capacity improvements (all packages other than 1, 2, 8, 10, 14, and 15), and that the improvements should not include tolls (Package 13 and potentially others).

Summary

The initial strategy packages were screened against purpose and need, high level natural and human environmental impacts, and high level engineering factors and costs to determine which packages would be carried forward for more detailed evaluation. The packages that best met purpose and need goals while not creating any standout environmental or engineering issues were carried forward. The recommend packages to be carried forward include:

• **Package 1 No-Build** – This is a requirement of the NEPA process

- Package 2 Fix Key Bottlenecks
- Package 5 Add General Lane Capacity
- Package 7 Fix Key Bottlenecks plus Transportation Improvement Corridor

These packages carried forward will likely be refined through the First Tier Reasonable Strategy evaluation process prior to the selection of a Preferred Strategy.

The following paragraphs briefly summarize why other packages were not carried forward. **Appendix B** also contains a table that summarizes the screening.

Package 3 Fix Key Bottlenecks plus HOV Lanes and Package 6 Add Capacity (HOV) and Transit Improvements were not carried forward because the elements within these packages were very similar to Package 7 which was carried forward.

Package 4 Fix Key Bottlenecks, HOV Lanes, Unique Design Features (Tunnel) was not carried forward because of the cost and other issues related to the tunnel. It is not an efficient or practical way to meet purpose and need.

Package 8 TSM/TDM plus BRT Solutions was not carried forward because it did not meet several purpose and need goals.

Package 9 Unique Capacity Designs (Stacked Lanes) was not carried forward primarily due to additional costs factors and interchange/overpass issues. It also would create purpose and need difficulties related to safety and access.

Package 10 Rail Transit was not carried forward due to not meeting purpose and need goals, potentially higher human environmental and cultural impacts, rail lines negotiating the upgraded curves, and light rail (specifically is not identified in local and regional plans.

Package 11 Freight Movement was not carried forward due to not meeting purpose and need goals. The diverse origin and destinations of truck movements around and through the area does not lend well to a dedicated truck only lane through the center of Kansas City.

Package 12 Collector Distributor Roads was not carried forward due to being included into Package 2 Fix Key Bottlenecks at select locations or incorporated into Package 5 Add General Purpose Capacity if traffic model results conclude that more than one lane in each direction is required along portions of the corridor.

Package 13 Privatization was not carried forward as a stand alone option due to being similar to Package 7 improvements. Privatization options are more a method to finance improvements and may be considered within future funding discussions for packages carried forward.

Package 14 Bus Transit Focus was not carried forward due to not meeting purpose and need goals as well as other packages and providing only limited improvement. Bus transit on the highway shoulder was added to Package 2 and Package 5 which were carried forward. Bus transit could also be a part of the specialized corridor in Package 7.

Package 15 Reduce Capacity was not carried forward due to not meeting purpose and need goals.

By the nature and level of analysis at this stage of the project all screening criteria are high level and will include some level of subjectivity.

Purpose and Need Criteria	Criteria for Meets Purpose and	Criteria for Does Not Meet	Criteria for Worse Than
_	Need Rating	Purpose and Need Rating	Existing Rating
<i>Improves Safety</i> : Reduce crash	The strategy includes	The strategy does not include	The strategy includes features
rates and crash severity on I-	improvements to address all or	improvements to address all or	such as new at-grade
70 and the downtown loop.	most of the locations with crash	most locations with crash rates	intersections instead of grade
	rates above the statewide	above the statewide average	separations that would
	average. The strategy allows for	and/or does not allow for the	potentially lead to higher
	the implementation of typical	implementation of standard	crash rates.
	safety improvements MoDOT is	safety improvements MoDOT is	
	making on freeway corridors	making on freeway corridors	
	statewide.	statewide.	
Reduces Congestion: Remove	The strategy includes measures	The strategy does not include	The strategy reduces overall
key bottlenecks, reduce the	that increase the capacity of the I-	measures that increase the	capacity within the corridor
potential for ramp back-up	70 corridor and/or increase	capacity of the I-70 corridor	without providing
onto the freeway, and	transit service and use that	and/or increase transit service	alternatives that could
improve multi-modal travel	would be sufficient to anticipate	and use that would be sufficient	reasonably be anticipated to
times.	a reduction in congestion to	to anticipate a reduction in	provide substitute capacity
	acceptable levels per the Practical	congestion to acceptable levels	on other routes.
	Design Manual.	per the Practical Design Manual.	
Restores and Maintains	The strategy includes corridor	The strategy does not include	Federal law requires MoDOT
Existing Infrastructure:	wide reconstruction of the	corridor wide reconstruction of	to maintain the existing I-70
Improve bridge and	existing highway either in place	the existing highway either in	corridor and the downtown
pavement conditions on I-70	or as part of a capacity expansion	place or as part of a capacity	loop (I-70, I-35, I-29, and I-
and the downtown loop and	and thus would renew the long-	expansion and thus would not	670). As a result, this rating
implement cost-effective	term condition of the I-70	renew the long-term condition of	does not apply for this
investment strategies.	corridor.	the I-70 corridor.	purpose and need goal.

Improves Accessibility:	The strategy includes reasonable	The strategy does not include	The strategy creates new
Provide travel options for all	measures to enhance crossing of	reasonable measures to enhance	barriers to crossing I-70
residents, increase safe access	the corridor for non-motorized	crossing of the corridor for non-	and/or would likely close
across I-70, and the	travel and increases the	motorized travel and increases	crossing of I-70 at multiple
downtown loop for non-	effectiveness of transit options in	the effectiveness of transit	points. The strategy reduces
motorized travel.	the corridor.	options.	or eliminates transit options
		-	in the corridor.
Improves Goods Movement:	The strategy provides safety and	The strategy does not provide	The strategy converts the
Improve the efficiency of	congestion improvements (as	safety and congestion	corridor to a facility that will
freight movement.	defined above) that would	improvements (as defined	not effectively serve freight
	effectively serve freight	above) that would effectively	movements as well as the
	movements in the corridor in	serve freight movements in the	existing facility by
	addition to passenger vehicles	corridor in addition to passenger	introducing additional
	and/or the strategy includes	vehicles and the strategy does	congestion or features such as
	specific features to effectively	not include specific features to	new at-grade intersections
	improve freight movement in the	effectively improve freight	that would slow the flow of
	corridor.	movement in the corridor.	goods.

Impact Criteria	Criteria for Fatal Flaw	Criteria for High Rating	Criteria for Medium	Criteria for Low Rating
-	Rating		Rating	
Human	Strategy footprint would	Strategy would be	Strategy would be	Strategy would be
Environmental	be anticipated to affect	anticipated to affect	anticipated to affect	anticipated to affect
Impacts	community,	community,	community,	community,
	neighborhood, or	neighborhood, or	neighborhood, or	neighborhood, or
	business resources in a	business resources in a	business resources in a	business resources in a
	manner that is either	manner that is	similar manner to most	manner that is
	illegal or unusually	substantially higher than	of the strategies under	substantially lower than
	devastating for a	most of the strategies	consideration.	most of the strategies
	MoDOT project in an	under consideration.		under consideration.
	urban area.			
Natural	Strategy footprint would	Strategy footprint would	Strategy footprint would	Strategy footprint would
Environmental	be anticipated to affect	be anticipated to affect	be anticipated to affect	be anticipated to affect
Impacts	air quality, floodplains,	air quality, floodplains,	air quality, floodplains,	air quality, floodplains,
	streams, wetlands, or	streams, wetlands, or	streams, wetlands, or	streams, wetlands, or
	natural sites in a manner	natural sites in a manner	natural sites in a similar	natural sites in a manner
	that is either illegal or	that is substantially	manner to most of the	that is substantially
	unusually devastating	higher than most of the	strategies under	lower than most of the
	for a roadway project in	strategies under	consideration.	strategies under
	an urban area.	consideration.		consideration.
Engineering Issues	Strategy includes	Strategy includes	Strategy is similar to	Strategy includes
	features that would	features that would be	most strategies under	features that would be
	render it essentially	anticipated to make	consideration in terms of	anticipated to make
	unbuildable or	design, construction,	anticipated design,	design, construction,
	completely impractical to	and/or maintenance of	construction, and	and/or maintenance of
	build as proposed.	traffic substantially more	maintenance of traffic	traffic substantially
		difficult than most of the	issues.	easier than most of the
		strategies under		strategies under
		consideration.		consideration.

Anticipated Cost (\$ to	\$\$\$\$ - Strategy is	\$\$\$ - All strategies that	\$\$ - Strategy would be	\$ - Strategy would have
\$\$\$\$)	anticipated to have a cost	add capacity/lanes to	anticipated to have	minimal additional cost
	that is orders of	urban freeway corridors	substantially lower costs	beyond what is
	magnitude higher than	would be cost in the	than most of the	anticipated for long-term
	other strategies.	hundreds of millions or	strategies proposed for	maintenance. By this
		billions of dollars and	the project.	definition only the No-
		would be considered		Build strategy is given a
		high cost.		single \$ rating.

Appendix B - Initial Strategy Package Evaluation

		Preliminary	Purpose and N	leed Evaluation	n		tal Issues Relative er Packages		Issues Relative Packages		
Strategy Packages		Reduce Congestion	Restore and Maintain Existing Infrastructure	Improve Accessibility Across/ Neighborhood	Improve Goods Movement	Human	Natural	Engineering Issues	Relative Costs	Carry Forward	Reasons
Strategy Package 1 - No-Build	Does Not Meet	Does Not Meet	Does Not Meet	Does Not Meet	Does Not Meet	Low	Medium	Low	\$	Yes	Required
Strategy Package 2 - Fix Key Bottlenecks	Meets	Meets	Meets	Meets	Meets	Low	Low	Medium	\$\$	Yes	Meets Purpose and Need - with BRT on shoulder and upgrade Benton and Jackson Curves, may include CD roads at key locations
Strategy Package 3 - Fix Key Bottlenecks plus HOV Lanes	Meets	Meets	Meets	Meets	Meets	Medium	Medium	Medium	\$\$\$	No	Similar to Packages 6 and 7
Strategy Package 4 - Fix Key Bottlenecks, HOV Lanes, Unique Designs	Meets	Meets	Meets	Meets	Meets	Medium	Medium	High	\$\$\$\$	No	Cost, other elements similar to other Packages
Strategy Package 5 - Add General Lane Capacity	Meets	Meets	Meets	Meets	Meets	Medium	Medium	Medium	\$\$\$	Yes	Meets Purpose and Need - include bus on shoulder provisions and possibly CD roads at key locations
Strategy Package 6 - Add Capacity (HOV Lanes) and Transit Improvements	Meets	Meets	Meets	Meets	Meets	Medium	Medium	Medium	\$\$\$	No	Similar to Packages 3 and 7
Strategy Package 7 - Fix Key Bottlenecks plus Transportation Improvement Corridor	Meets	Meets	Meets	Meets	Meets	Medium	Medium	Medium	\$\$\$	Yes	Meets Purpose and Need
Strategy Package 8 - TSM/TDM Solutions Alternative (Lane Conversion to BRT)	Does Not Meet	Does Not Meet	Does Not Meet	Meets	Does Not Meet	Low	Medium	Low	\$\$	No	Does not meet Purpose and Need
Strategy Package 9 - Unique Capacity Designs Alternative (Stacked Lanes)	Meets	Meets	Meets	Worse than Existing	Meets	Low	Medium	High	\$\$\$\$	No	Does not meet Purpose and Need
Strategy Package 10 - Rail Transit Alternative	Does Not Meet	Does Not Meet	Does Not Meet	Meets	Does Not Meet	Medium	Medium	High	\$\$\$	No	Does not meet Purpose and Need
Strategy Package 11 - Freight Movement Alternative	Meets	Does Not Meet	Meets	Does Not Meet	Meets	Medium	Medium	Medium	\$\$\$	No	Does not meet Purpose and Need
Strategy Package 12 - Collector Distributor Roads Alternative	Meets	Meets	Meets	Meets	Meets	High	Medium	Medium	\$\$\$	No	Elements can be included in Package 2 (spot improvements) and Package 5 based on traffic analysis and high social impacts
Strategy Package 13 - Privatization Alternative	Does Not Meet	Meets	Meets	Does Not Meet	Meets	Medium	Medium	Medium	\$\$ / \$\$\$	No	Does not meet Purpose and Need by itself. Private sector could be involved in funding parts of other packages carried forward.
Strategy Package 14 - Bus Transit Focus Alternative	Does Not Meet	Does Not Meet	Does Not Meet	Meets	Does Not Meet	Low	Medium	Low	\$\$	No	Does not meet Purpose and Need
Strategy Package 15 - Reduce Capacity Alternative	Worse than Existing	Worse than Existing	Does Not Meet	Meets	Worse than Existing	Low	Low	Medium	\$\$\$	No	Does not meet Purpose and Need

Purpose and Need Legend
Meets Purpose and Need

Meets Purpose and Need Does Not Meet Purpose and Need Worse than Existing Environmental and Engineering Legend

Fatal Flaw - Illegal or unusually devastating
High - Substantially higher impacts than most packages
Medium - Similar impacts as most other packages
Low - Substantially lower impacts than most other packages

Strategy Package 1 - No-Build (MIS)

I-435 MIS preferred strategy components
Northland / Downtown MIS preferred strategy components
I-70 pavement restoration and maintenance (programmed)
Bridge replacement projects (programmed)
Interchange improvements (programmed)
Maintain existing bus service

Strategy Package 2 - Fix Key Bottlenecks (MIS)

Package 1 plus the following additional elements:

- Rehabilitation or rebuilding of I-70 as 6-lanes
- Rehabilitation of all functionally obsolete or structurally deficient bridges
- Downtown loop operational improvements
- Consolidate loop access on north and east legs
- Low-cost operational interchange improvements (I-470, US 40 Blue Ridge Boulevard, Paseo Boulevard, 22nd/23rd Street, 31st & Van Brunt Boulevard, and Manchester I-70 Viaduct)
- Geometric improvements at Benton Boulevard and Jackson Avenue curves
- Upgrade Truman Road interchange
- Operation Green Light / Advance Public Transportation Systems (on parallel routes)
- Expand I-70 community express service and park and ride facilities
- Expand emergency management

Strategy Package 3 - Fix Key Bottlenecks plus HOV Lanes (MIS)

Package 2 plus the following additional elements:

- HOV lanes from the Loop to US 40 / Blue Ridge Boulevard
- Rehabilitation or rebuilding of interchanges and bridges to accommodate the additional mainline lanes
- Geometric improvements at Benton Boulevard and Jackson Avenue curves
- Implement Smart Moves Transit Plan
- Transit centers

Strategy Package 4 - Fix Key Bottlenecks, HOV Lanes, Unique Features (MIS)

Package 3 plus the following additional elements:

- Tunnel from 22nd/23rd Street to the northeast corner of the loop
- Community bridges (northside of loop, east of Van Brunt Boulevard, Noland Road, and potentially south side of loop)
- Support commuter rail along I-70

Strategy Package 5 - Add General Lane Capacity (MIS)

Package 1 plus the following additional elements:

- Rehabilitation or rebuilding of I-70 as 8-lanes
- Rehabilitation or rebuilding of interchanges and bridges to accommodate 8 lanes to meet current design standards
- New design/rebuild north and east legs of loop and consolidate loop access
- Interchange improvement at southwest corner of loop
- Enhance southeast loop interchange

Strategy Package 6 - Add Capacity (HOV Lanes) and Transit Improvements (MIS)

Package 5 plus the following additional elements:

- HOV lanes (potential toll)
- Bus Rapid Transit on parallel routes
- Implement Smart Moves Transit Plan and Transit Centers
- Community bridges
- Implement commuter rail

Strategy Package 7 - Fix Key Bottlenecks plus Transportation Improvement Corridor (MIS Recommended)

- Rehabilitation or rebuilding of I-70 from the Loop to US 40 / Blue Ridge Boulevard as 6-lanes with provisions of a transportation improvement corridor (HOV lanes, HOT lanes, reversible lanes, BRT lanes, or TOL).
- Rehabilitation or rebuilding of I-70 from US 40 / Blue Ridge Boulevard to I-470 as 8-lanes
- Downtown loop operational improvements
- Rehabilitation or rebuilding of interchanges and bridges to accommodate the additional lanes
- Geometric improvements at Benton Boulevard and Jackson Avenue curves
- Transit and other improvements (community bridges, Operation Green Light, Smart Moves Plan, Commuter Rail, transit centers, park and ride facilities, expand emergency management)

Strategy Package 8 - TSM/TDM Solutions Alternative

Convert general purpose lane to Bus Rapid Transit TDM and TSM Bicycle/pedestrian access Community bridges

Strategy Package 9 - Unique Capacity Designs Alternative

Stacked or elevated lanes One-way loop Community bridges

Strategy Package 10 - Rail Transit Alternative

Rebuild I-70 Light rail in the I-70 Corridor

Strategy Package 11 - Freight Movement Alternative

Rebuild I-70 Truck only lanes

Strategy Package 12 - Collector Distributor Roads Alternative

Collector distributor roads along entire corridor

Strategy Package 13 - Privatization Alternative

Assumes some additional lanes with a toll

Strategy Package 14 - Bus Transit Focus Alternative

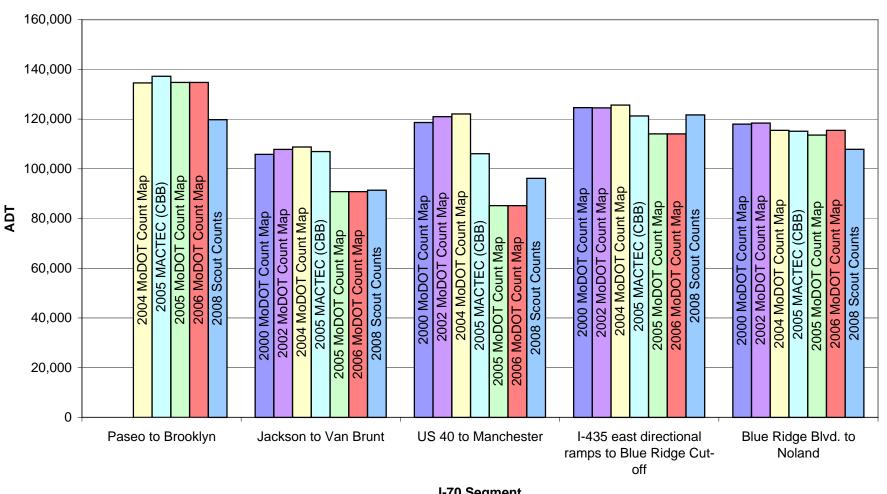
Advance public transportation systems
Exclusive Bus Rapid Transit lane

Strategy Package 15 - Reduce Capacity Alternative

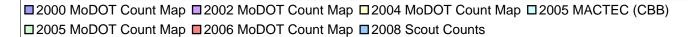
Convert to an at-grade parkway

Traffic Data

I-70 Historical Mainline Volumes



I-70 Segment



				Existin	g 2008	I-70 No	o Build	I-70 Fix Bo	ottlenecks	I-70 Gener	al Capacity	I-70	TIC
Order ID	Interchange	Segment Type	Dir	AM final	PM final	AM final	PM final	AM final	PM final	AM final	PM final	AM final	PM final
1		Basic	EB	2,200	5,475	2,475	6,175	2375	6050	2650	6575	2575	6550
2	Paseo	On Ramp	LD	100	250	125	300	125	325	0		150	375
3		Weave	EB	2,300	5,725	2,600	6,475	2500	6375	2650	6575	2725	6925
4	Brooklyn	Off Ramp	EB	125 2,175	150 5,575	125 2,475	150 6,325	0 2500	0 6375	450 2200	675 5900	0 2725	0 6925
5 6		Diverge Off Ramp	EB	2,175	450	325	500	325	525	2200		325	525
7	Prospect	Basic	EB	1,925	5,125	2,150	5,825	2175	5850	2200	5900	2400	4275
8		On Ramp		175	250	175	250	175	250	300	600	175	300
9 10		Merge	EB EB	2,100 2,100	5,375 5,375	2,325 2,325	6,075 6,075	2350 2350	6100 6100	2500 2500	6500 6500	2575 2575	4575 4575
10	Truman	Diverge Off Ramp	EB	2,100	400	2,325	350	2500	375	275		375	4575
12		Diverge	EB	1,850	4,975	2,100	5,725	2100	5725	2225	6100	2200	4150
13		Off Ramp		100	75	100	50	100	50	100		0	0
14	18th	Basic	EB	1,750 200	4,900 225	2,000 275	5,675 300	2000	5675 0	2125 0		2200 0	4150 0
15 16		On Ramp Weave	EB	1,950	5,125	2,275	5,975	2000	5675	2125	6050	2200	4150
17		Off Ramp		100	425	100	350	100	350	100		100	350
18	23rd	Basic	EB	1,850	4,700	2,175	5,625	1900	5325	2025		2100	3800
19		On Ramp	EB	50	75 4.775	50	100	325	400 5705	350 2375		350	425
20		Merge Diverge	EB	1,900 1,900	4,775 4,775	2,225 2,225	5,725 5,725	2225 2225	5725 5725	2375		2450 2450	4225 4225
22	27th	Off Ramp		50	75	50	100	50	100	50		0	0
23		Diverge	EB	1,850	4,700	2,175	5,625	2175	5625	2325	6025	2450	4225
24	la al-a a a	Off Ramp	ED	150	150	125	125	125	125	125		175	225
25 26	Jackson	Basic On Ramp	EB	1,700 125	4,550 175	2,050 150	5,500 200	2050 150	5500 200	2200 175		2275 175	4000 250
27		Merge	EB	1,825	4,725	2,200	5,700	2200	5700	2375		2450	4250
28		Diverge	EB	1,825	4,725	2,200	5,700	2200	5700	2375	6150	2450	4250
29	Man Down	Off Ramp	EB	150	125	150	125	150	125	150		150	125
30	Van Brunt	Basic On Ramp	EB	1,675 175	4,600 325	2,050 175	5,575 375	2050 175	5575 375	2225 175	6025 400	2300 175	4125 425
32		Merge	EB	1,850	4,925	2,225	5,950	2225	5950	2400	6425	2475	4550
33		Diverge	EB	1,850	4,925	2,225	5,950	2225	5950	2400	6425	2475	4550
34	11, 40, 14,	Off Ramp		50	475	50	375	100	425	100		100	450
35 36	Hwy 40 West	Basic On Ramp	EB	1,800 75	4,450 350	2,175 125	5,575 425	2125 125	5525 450	2300 150	6000 500	2375 150	4100 475
37		Merge	EB	1,875		2,300	6,000		5975				4575
38		Diverge	EB	1,875	4,800	2,300	6,000	2250	5975	2450		2525	4575
39	1	Off Ramp		125	75	125	100	0	0	0	0	0	0
40	Manchester	Basic On Ramp	EB	1,750 50	4,725 250	2,175 50	5,900 175	2250 0	5975 0	2450 0		2525 0	4575 0
42		Weave	EB	1,800	4,975	2,225	6,075	2250	5975	2450		2525	4575
43		Off Ramp		525	850	575	925	550	850	550	850	575	875
44		Diverge	EB	1,275	4,125	1,650	5,150	1700	5125	1900	5650	1950	3700
45 46	I-435	Off Ramp Basic		225 1,050	325 3,800	275 750	350 4,050	300 750	350 4025	300 950	350 4550	300 1000	350 2600
47	1	On Ramp		1,175	2,600	1,425	3,150	1425	3175	1425	3250	1475	3375
48		Weave		2,225	6,400	2,175	7,200	2175	7200	2375	7800	2475	5975
49		Off Ramp		400	500	625	750	650	750	650		650	750
50 51	Blue Ridge Cutoff	Basic On Ramp	EB	1,825 150	5,900 450	2,175 250	7,200 675	2175 275	7200 725	2375 275	7800 750	2475 275	5975 750
52		Merge	EB	1,975	6,350	2,425	7,875	2450	7925	2650	8550	2750	6725
53		Basic	EB	1,975	6,350	2,425	7,875	2450	7925	2650	8550	2750	6725
54		Diverge	EB	1,975	6,350	2,425	7,875	2450	7925	2650	8550	2750	6725
55 56	Sterling	Off Ramp Basic	EB	200 1,775	425 5,925	225 2,200	450 7,425	225 2225	450 7475	225 2425	450 8100	225 2525	450 6275
57		Diverge	EB	1,775	5,925	2,200	7,425	2225	7475	2425	8100	2525	6275
58		Off Ramp		150	450	200	650	200	650	200	650	200	675
59	Hwy 40 East	Basic	EB	1,625	5,475	2,000	6,775	2025	6825	2225	7450	2325	5600
60 61		On Ramp Merge	EB	175 1,800	375 5,850	225 2,225	500 7,275	225 2250	500 7325	0 2225	7450	0 2325	0 5600
62	Blue Ridge Blvd	On Ramp	ED	1,800	5,850 375	300	400	300	400	550		550	950
63		Merge	EB	2,075	6,225	2,525	7,675	2550	7725	2775	8375	2875	6550
64		Basic	EB	2,075	6,225	2,525	7,675	2550	7725	2775		2875	6550
65 66		Diverge Off Ramp	EB	2,075 375	6,225 675	2,525 375	7,675 700	2550 375	7725 700	2775 400	8375 700	2875 400	6550 725
67	Noland	Off Ramp Basic	EB	1,700	5,550	2,150	6,975	2175	700	2375	7675	2475	5825
68	1	On Ramp		250	550	325	750	325	750	350	775	350	800
69		Merge	EB	1,950	6,100	2,475	7,725	2500	7775	2725	8450	2825	6625
20		Basic	EB	1,950	6,100	2,475	7,725	2500	7775	2725	8450	2825	6625
71		Diverge	EB	1,950	6,100	2,475	7,725	2500	7775	2725	8450	2825	8750
72	1	Off Ramp	ED.	225	775 5 225	250	850	250	850	275		275	1000
73 74	Lees Summit	Basic	EB	1,725 1,725	5,325 5,325	2,225 2,225	6,875 6,875	2250 2250	6925 6925	2450 2450	7500 7500	2550 2550	7750 7750
75	1	On Ramp		1,725	5,325 450	2,225	6,875	2250	6925	2450	650	2550	675
76		Merge	EB	1,900	5,775	2,450	7,500	2475	7550	2675		2775	8425
77		Basic	EB	1,900	5,775	2,450	7,500	2475	7550	2675		2775	8425
78		Diverge	EB	1,900	5,775	2,450	7,500	2475	7550	2675	8150	2775	8425
79		Off Ramp		475	1,025	625	1,325	625	1325	725		750	1550
80	4	Basic	EB	1,425	4,750	1,825	6,175		6225	1950		2025	6875
81	I-470	On Ramp	EB	250 1 675	475 5 225	375	700		700	375			675
82 83	. 470	Weave Off Ramp	FR	1,675 275	5,225 550	2,200 275	6,875 550		6925 550	2325 300		2400 300	7550 600
84	1	Basic	EB	1,400	4,675	1,925	6,325	1950	6375	2025	6725	2100	6950
85		On Ramp		425	825	550	1,150	550	1150	550	1125	550	1125
86		Merge		1,825	5,500	2,475	7,475	2500	7525	2575	7850	2650	8075
87 88		Basic	WB	6,650	3,325	7,400	3,675	7025	3400	7750	3850	7575	3675
89	Paseo	Off Ramp	,,, D	100	75	150	100		125	0			125
90		Weave	WB	6,750	3,400	7,550	3,775	7200	3525	7750	3850	7775	3800
91	Brooklyn	On Ramp		325	225	350	250	0	0	500	475	0	0

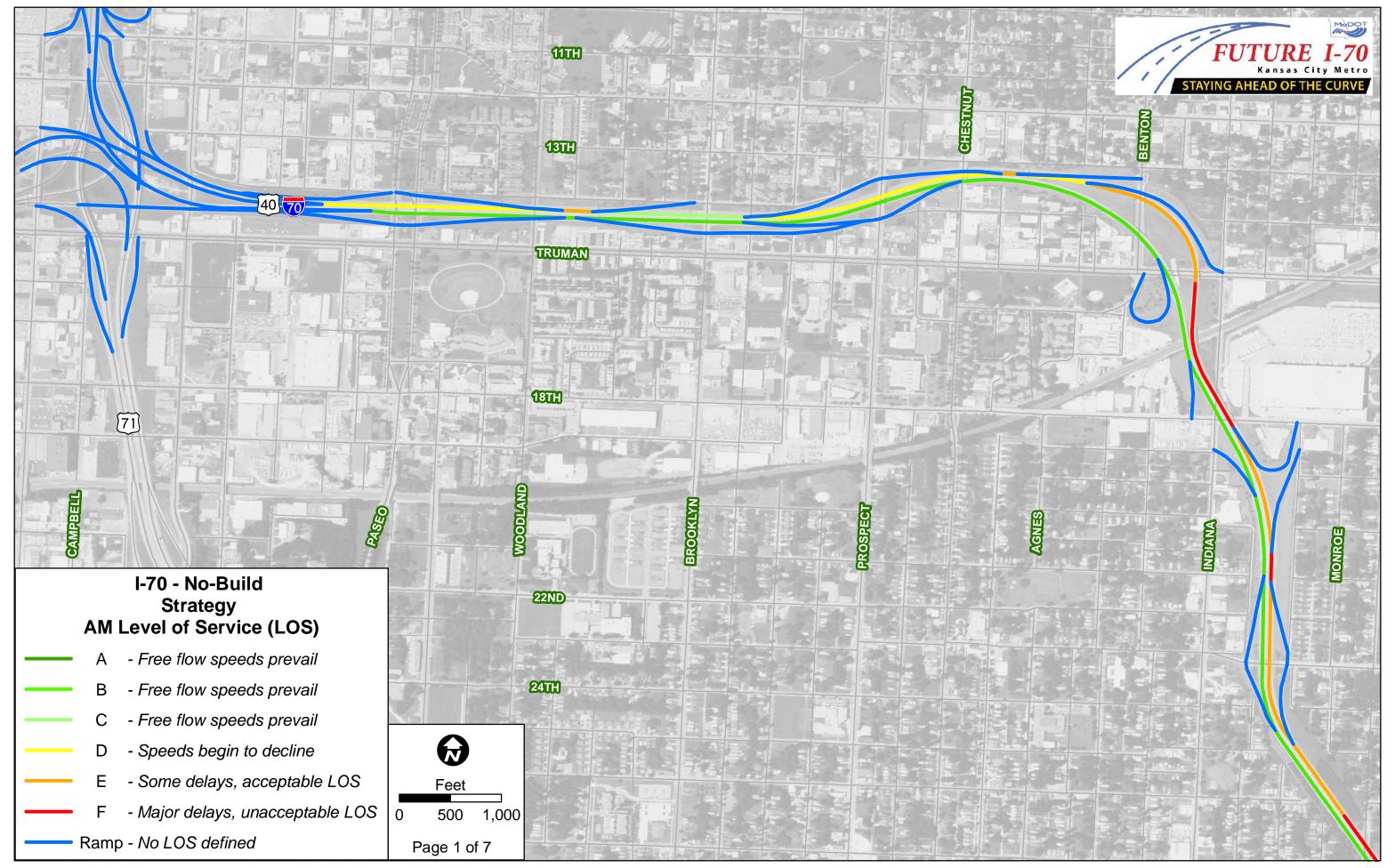
				Existin	g 2008	I-70 No	Build	I-70 Fix Bo	ottlenecks	I-70 Genera	al Capacity	I-70	TIC
Order ID	Interchange	Segment Type	Dir	AM final	PM final	AM final	PM final	AM final	PM final	AM final	PM final	AM final	PM final
92		Merge	WB	6,425	3,175	7,200	3,525	7200	3525	7250	3375	7775	3800
93		On Ramp	VVD	175	225	175	225	175	225	0	0	150	225
94	Prospect	Basic	WB	6,250	2,950	7,025	3,300	7025	3300	7250	3375	5950	3575
95		Off Ramp		125	150	150	150	150	150	250	225	175	175
96 97	Benton	Weave On Ramp	WB	6,375 475	3,100 325	7,175 525	3,450 350	7175 0	3450 0	7500 0	3600 0	6125 0	3750
98	Benton	Merge		5,900	2,775	6,650	3,100	7175	3450	7500	3600	6125	3750
99	Truman	On Ramp		325	300	300	275	825	625	775	600	800	625
100		Basic	WB	5,575	2,475	6,350	2,825	6350	2825	6725	3000	5325	3125
101 102		Merge	WB	5,575	2,475	6,350	2,825	6350	2825	6725	3000	5325	3125
102	18th	On Ramp Basic	WB	50 5,525	75 2,400	50 6,300	75 2,750	50 6300	75 2750	50 6675	75 2925	50 5275	75 3050
104	-	Off Ramp	***	175	100	275	150	275	150	300	175	300	175
105		Weave	WB	5,700	2,500	6,575	2,900	6575	2900	6975	3100	5575	3225
106		On Ramp		475	175	425	150	425	150	400	150	400	150
107	23rd	Basic	WB	5,225	2,325	6,150	2,750	6150	2750	6575	2950 75	5175	3075 75
108 109		Off Ramp Diverge	WB	75 5,300	50 2,375	100 6,250	75 2,825	100 6250	75 2825	100 6675	3025	100 5275	3150
110		Merge	WB	5,300	2,375	6,250	2,825	6250	2825	6675	3025	5275	3150
111		On Ramp		125	150	150	175	150	175	150	200	150	200
112	Jackson	Basic	WB	5,175	2,225	6,100	2,650	6100	2650	6525	2825	5125	2950
113	-	Off Pamp		5,175 325	2,225 175	6,100 375	2,650 200	6100 400	2650 200	6525 500	2825 250	5125 500	2950 250
114 115	+	Off Ramp Diverge	WB	5,500	2,400	6,475	2,850	6500	2850	7025	3075	5625	3200
116		Merge	WB	5,500	2,400	6,475	2,850	6500	2850	7025	3075	5625	3200
117		On Ramp		125	175	150	175	150	175	150	175	150	175
118	Van Brunt	Basic	WB	5,375	2,225	6,325	2,675	6350	2675	6875	2900	5475	3025
119		Basic Off Barra	MD	5,375	2,225	6,325	2,675	6350	2675	6875	2900	5475	3025
120 121	+	Off Ramp Weave	WB WB	525 5,900	275 2,500	600 6,925	275 2,950	600 6950	275 2950	650 7525	300 3200	650 6125	300 3325
122		On Ramp	VVD	600	150	475	150	500	225	525	225	550	225
123	Hwy 40 West	Basic	WB	5,300	2,350	6,450	2,800	6450	2725	7000	2975	5575	3100
124		Off Ramp		100	50		100	175	100	200	125	200	125
125		Diverge	WB	5,400	2,400	6,575	2,900	6625	2825	7200	3100	5775	3225
126 127		Basic Merge	WB WB	5,400 5,400	2,400 2,400	6,575 6,575	2,900 2,900	6625 6625	2825 2825	7200 7200	3100 3100	5775 5775	3225 3225
128		On Ramp	VVD	75	125		2,900 175		2023		0		
129	Manchester	Basic	WB	5,325	2,275	6,475	2,725	6625	2825	7200	3100	5775	3225
130		Off Ramp		200	75	250	100	0	0	0	0	0	0
131		Weave		5,525	2,350	6,725	2,825	6625	2825	7200	3100	5775	3225
132 133	4	On Ramp	WB	1,375 4,150	650 1,700	1,650 5,075	800 2,025	1650 4975	800 2025	1650 5550	800 2300	1675 4100	800 2425
133	I-435	Basic Off Ramp	WB	4,150 875	625	1,125	800	1125	800	1200	2300 875	1300	950
135	1	Diverge	WB	5,025	2,325	6,200	2,825	6100	2825	6750	3175	5400	3375
136		Off Ramp		1,350	1,300	1,650	1,575	1675	1600	1700	1625	1700	1625
137		Diverge	WB	6,375	3,625	7,850	4,400	7775	4425	8450	4800	7100	5000
138		Merge	WB	6,375	3,625	7,850	4,400	7775	4425	8450	4800	7100	5000
139 140	Blue Ridge Cutoff	On Ramp Basic	WB	625 5,750	525 3,100	675 7,175	550 3,850	675 7100	550 3875	750 7700	575 4225	775 6325	600 4400
141	Black Hage Gaten	Off Ramp	***	225	250	275	325	350	325	350	325	350	325
142		Diverge	WB	5,975	3,350	7,450	4,175	7450	4200	8050	4550	6675	4725
143		Basic	WB	5,975	3,350	7,450	4,175	7450	4200	8050	4550	6675	4725
144		Basic	WD	5,975	3,350	7,450	4,175	7450	4200	8050	4550	6675	4725
145 146	+	Merge On Ramp	WB	5,975 825	3,350 575	7,450 925	4,175 675	7450 925	4200 675	8050 975	4550 725	6675 975	4725 725
147	Hwy 40 East	Basic	WB	5,150	2,775	6,525	3,500	6525	3525	7075	3825	5700	4000
148		Off Ramp		300	500	300	525	325	525	325	550	325	550
149		Diverge	WB	5,450	3,275	6,825	4,025	6850	4050	7400	4375	6025	4550
150 151	-	Basic	WB WB	5,450 5,450	3,275 3,275	6,825 6,825	4,025 4,025	6850 6850	4050 4050	7400 7400	4375 4375	6025 6025	4550 4550
151	+	Merge On Ramp	VVD	300	3,275 600	300	4,025	300	625	325	4375 675	325	4550 675
153	Noland	Basic	WB	5,150	2,675	6,525	3,400	6550	3425	7075	3700	5700	3875
154		Off Ramp		175	425	225	525	225	525	225	550	225	550
155		Diverge	WB	5,325	3,100	6,750	3,925	6775	3950	7300	4250	5925	4425
156	1	Basic	WB WB	5,325 5,325	3,100 3,100	6,750 6,750	3,925 3,925	6775 6775	3950 3950	7300 7300	4250 4250	5925 7600	4425 4425
157 158	+	Merge On Ramp	WR	5,325 625	3,100	700	3,925 425	700	3950 425	7300	4250 450	800	500
159	1	Basic	WB	4,700	2,700	6,050	3,500	6075	3525	6575	3800	6800	3925
160	Lees Summit			4,700	2,700	6,050	3,500	6075	3525	6575	3800	6800	3925
161		Off Ramp		225	475	275	575	275	575	300	650	300	675
162	1	Diverge	WB	4,925	3,175	6,325	4,075	6350	4100	6875 6875	4450	7100	4600
163 164	+	Basic Merge	WB WB	4,925 4,925	3,175 3,175	6,325 6,325	4,075 4,075	6350 6350	4100 4100	6875 6875	4450 4450	7100 7100	4600 4600
165		On Ramp	VVD	4,925	550	425	550	425	550	475	600	500	625
166]	Basic	WB	4,500	2,625	5,900	3,525	5925	3550	6400	3850	6600	3975
167]	Off Ramp		750	625	1,125	800	1125	800	1100	775	1100	775
168	I-470	Weave	WB	5,250	3,250	7,025	4,325	7050	4350	7500	4625	7700	4750
169 170	4	On Ramp	WB	800	650 2 600		850 3.475		850 3500	1175 6325	925 3700		950 3800
170	1	Basic Off Ramp	WB	4,450 475	2,600 400		3,475 650	6000 775	650	725	3700 625	725	3800 625
171		Diverge		4,925	3,000		4,125	6775	4150	7050	4325	7250	
		5. 50		.,525	2,000	5,725	., .20	5.75	. 100	. 555	.525		20

Total Crashes 2003 to 2007

Source: MoDOT TMS Database

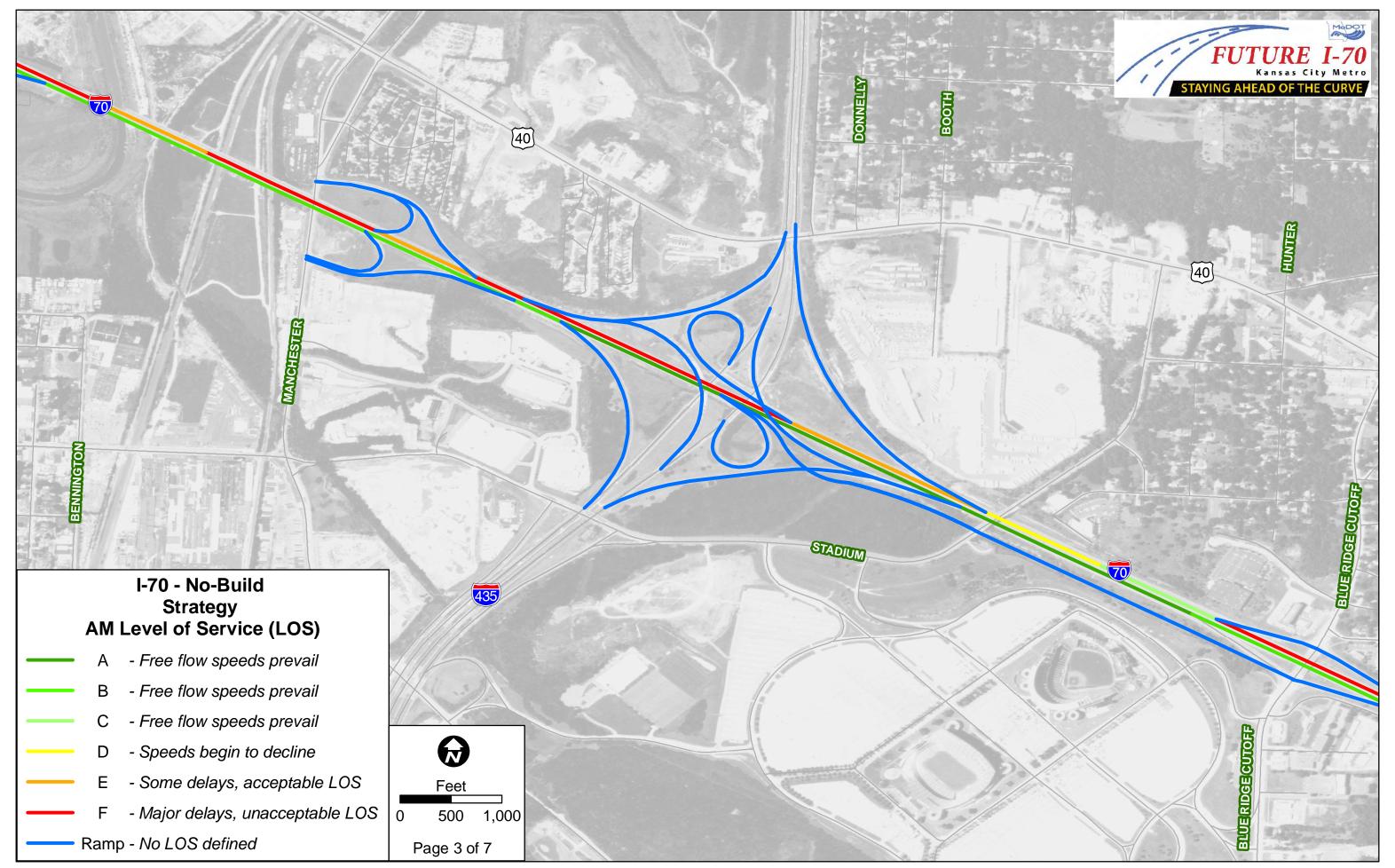
	Name	FD						Total	
		EB	WB	EB	WB	EB	WB	EB	WB
	Loop- N				•		•		•
Downtown	Loop- E	10	200	,	.45		-	200	22
	Loop- S	7	1682		345	,	5	2032	
	Loop- W								
	Loop to Paseo								
	Paseo Int.								
	Paseo to Brooklyn	123	165	31	79	0	0	154	244
_	Brooklyn to Prospect								
	Brooklyn to Prospect								
	Prospect								
	Prospect to Benton	142	218	33	49	1	1	176	268
	Benton to 18th	- ' '-							
	18th St.	=							
	18th St.								
L	18th to 23rd	-							
	23rd St.	46	35	11	7	0	0	57	42
	23rd to 27th	_							
	23rd to 27th								
<u> </u>		_							
Iackson Cilirva -	27th to Jackson	119	54	59	21	0	0	178	75
odokoon odrve	Jackson Curve								
	Jackson to Van Brunt								
Van Briint 🕒	Jackson to Van Brunt								
Interchange	Van Brunt	119	72	29	23	1	1	149	96
	Van Brunt to US-40								
Interchange	Van Brunt to US-40								
	US 40 W. Int.	72	45	27	14	1	0	100	59
	US 40 to Manchester								
Manchester	US 40 to Manchester		48	29	18	0	0	112	
	Manchester	83							66
Interchange	Manchester to I-435 west directional ramps								
	Manchester to I-435 west directional ramps								
I-435	I-435 west directional ramps to I-435 loop ramps	400	400	20	42	1	1	142	400
	I-435 loop ramps to I-435 east directional ramps	109	120	32					163
	I-435 east directional ramps to Blue Ridge Cut-off								
	I-435 east directional ramps to Blue Ridge Cut-off								
	Blue Ridge Cut-off	139	148	46	46	1	0	186	194
	Blue Ridge Cut-off to Sterling								
	Blue Ridge Cut-off to Sterling				†				
	Sterling to US-40	 							
0.5. 40 East	US 40 E	175	132	52	49	0	2	227	183
	US 40 E to Blue Ridge Blvd.	- '''	102	52	43		_	221	100
	Blue Ridge Blvd. to Noland	-							
	Blue Ridge Blvd. to Noland	-	-		1				
INDIANG ROAG -	<u> </u>	144	144	55	46	3	2	202	100
Interchange -	Noland	— 144 —	144	ນວ	40	3	4	202	192
	Noland to Lee's Summit								
	Noland to Lee's Summit		00	00	00	_	_	400	405
	Lee's Summit	100	96	38	39	0	0	138	135
Interchange	Lee's Summit to I-470 SB directional ramps								
Ļ	Lee's Summit to I-470 SB directional ramps	_							
1-4/11	I-470 SB directional ramps to I-470 SB loop ramps					0	0		
Interchange	I-470 SB loop ramps to I-470 NB loop ramps	100	113	44				144	143
_	I-470 NB loop ramps to I-470 NB directional ramps								
	I-470 NB directional ramps to Little Blue Pkwy.								
Totals		ΔF	543	13	294	2	20	58	357

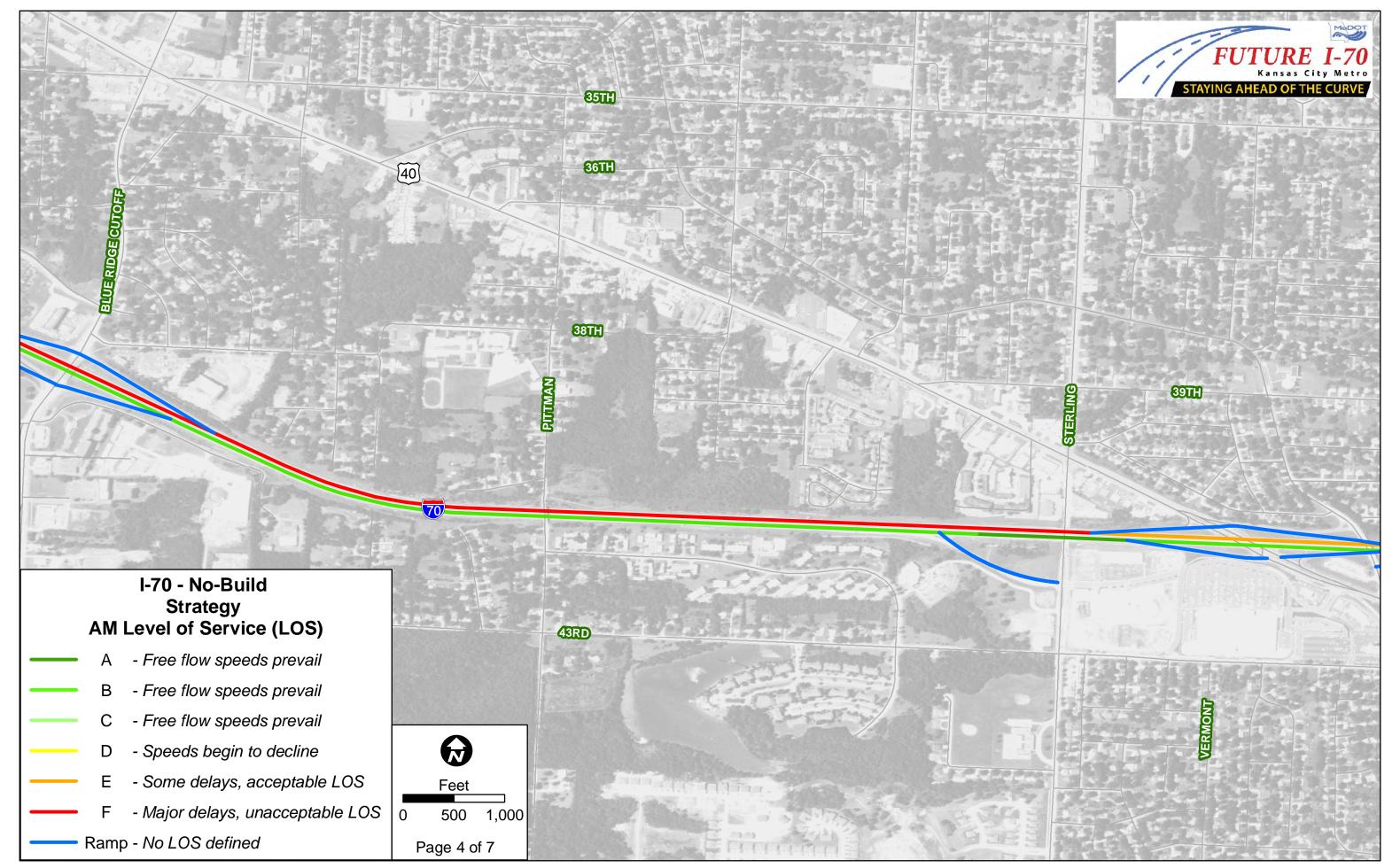
77.57% 22.09% 0.34%

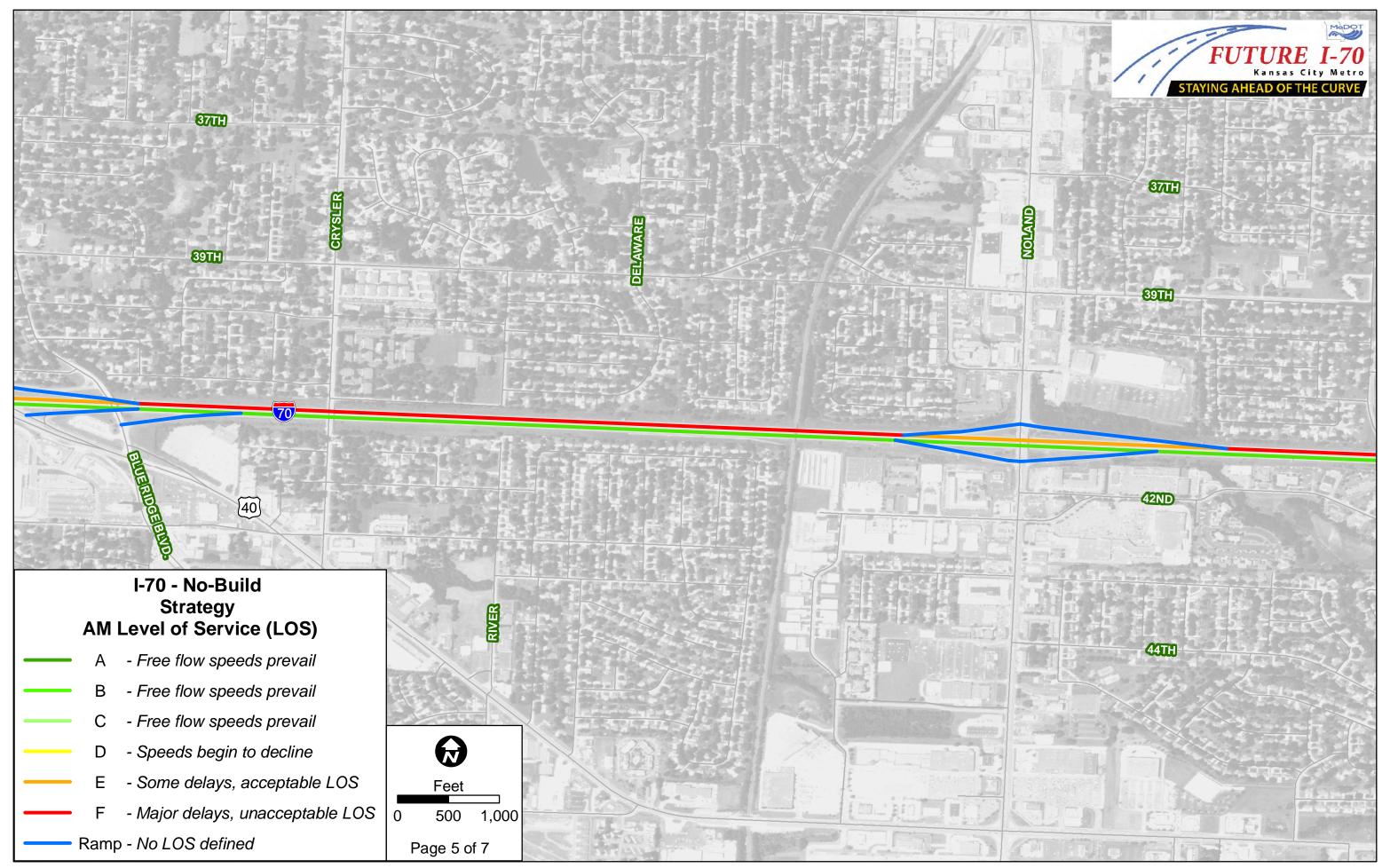


Level of Service Analysis

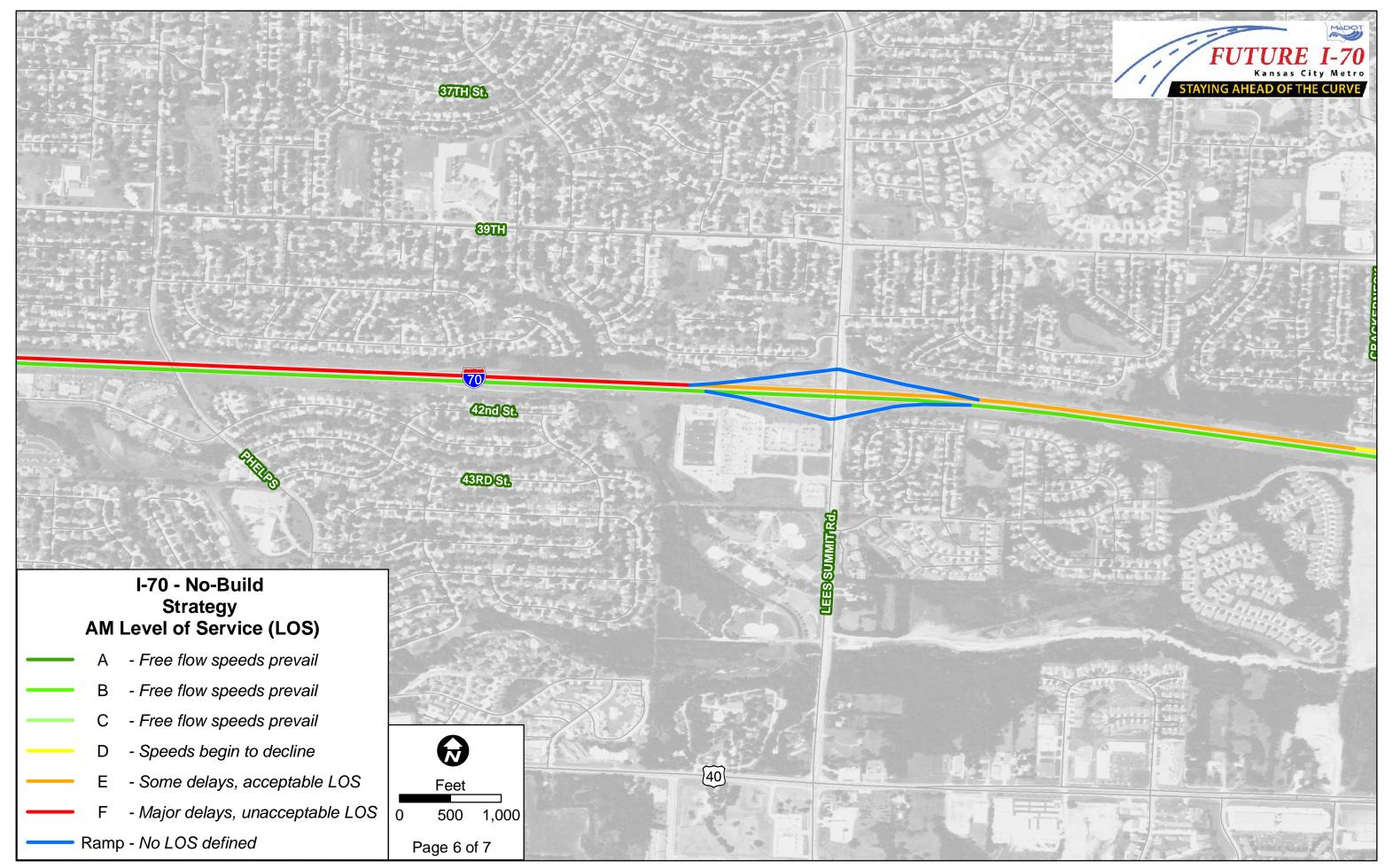


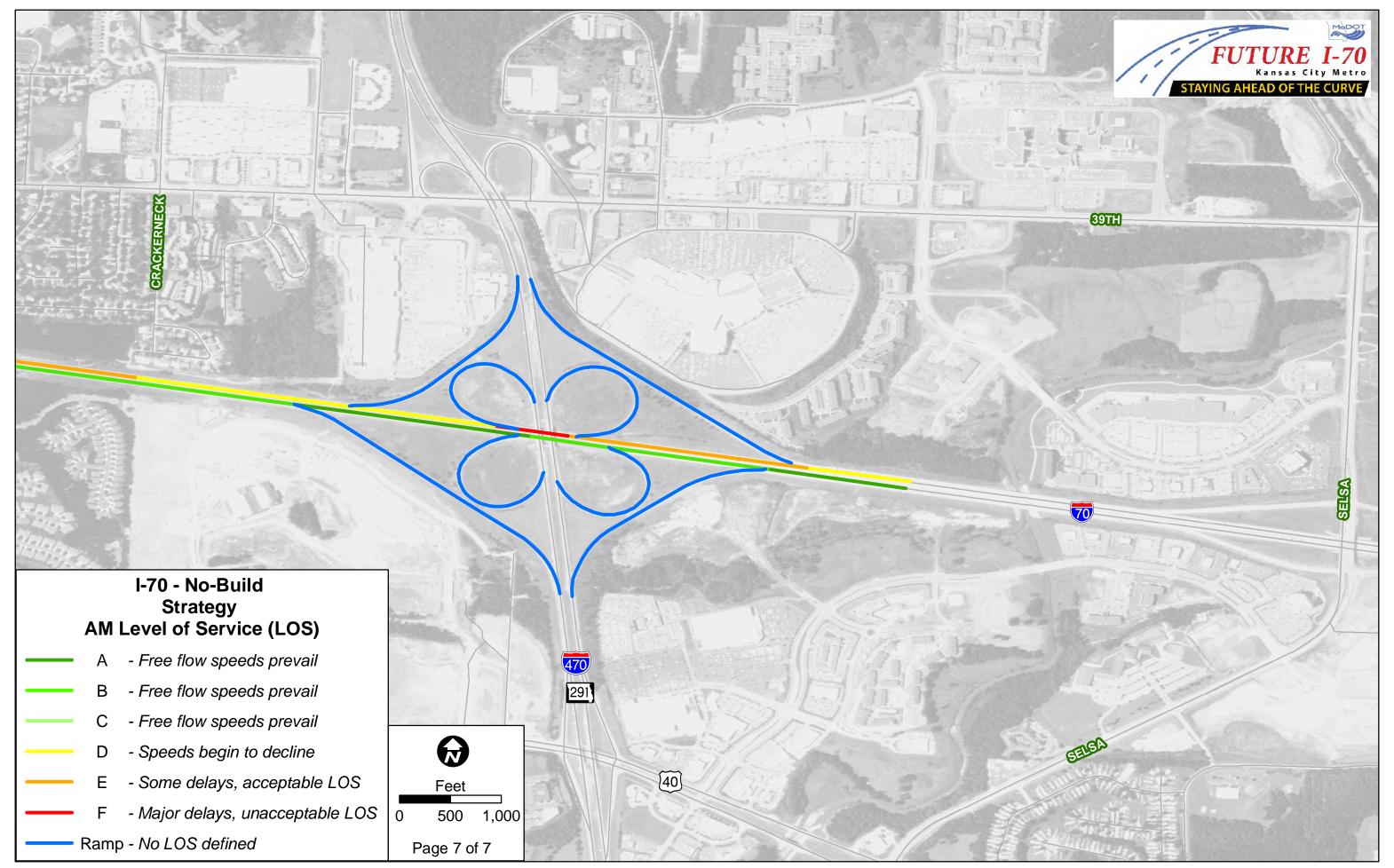


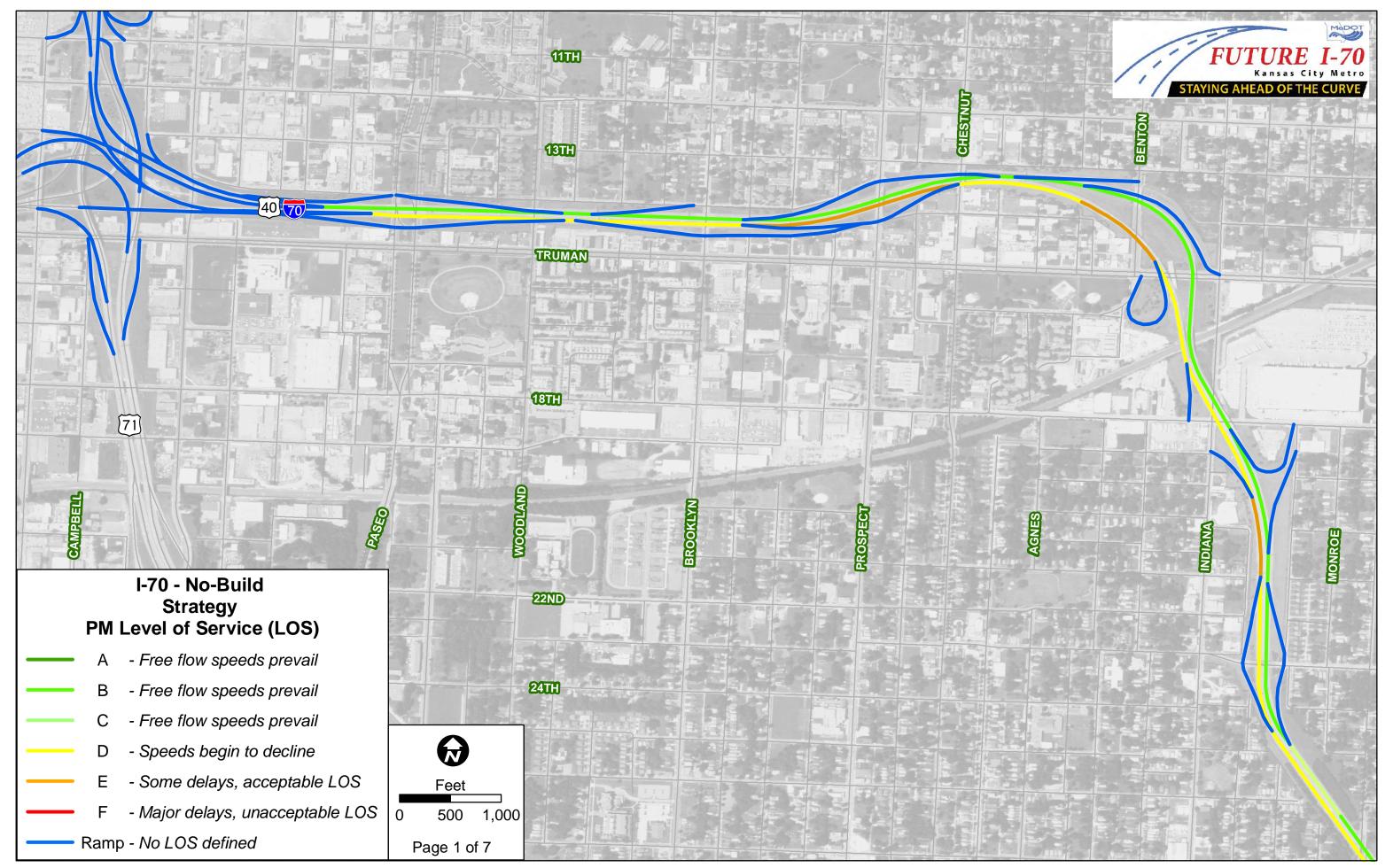


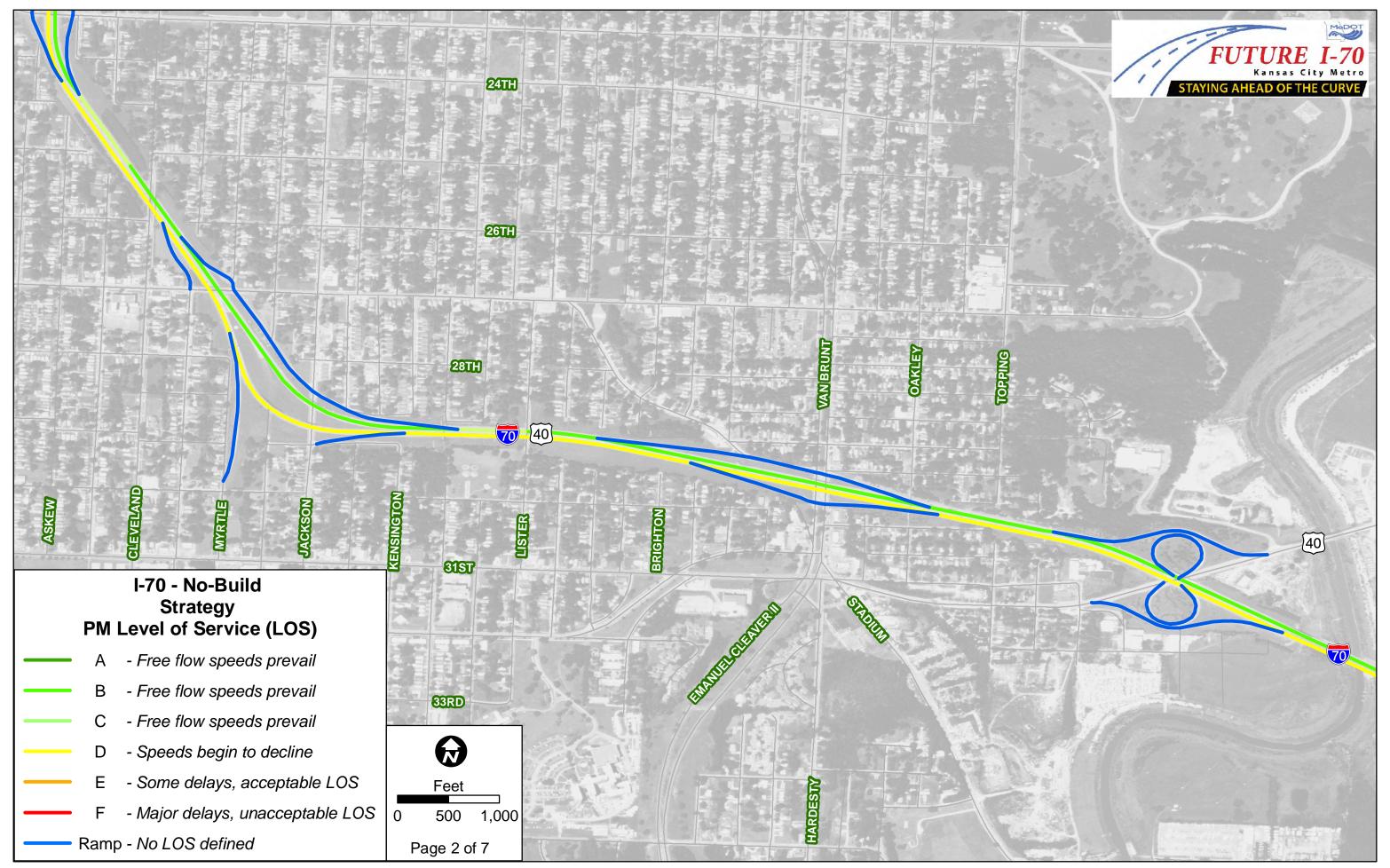


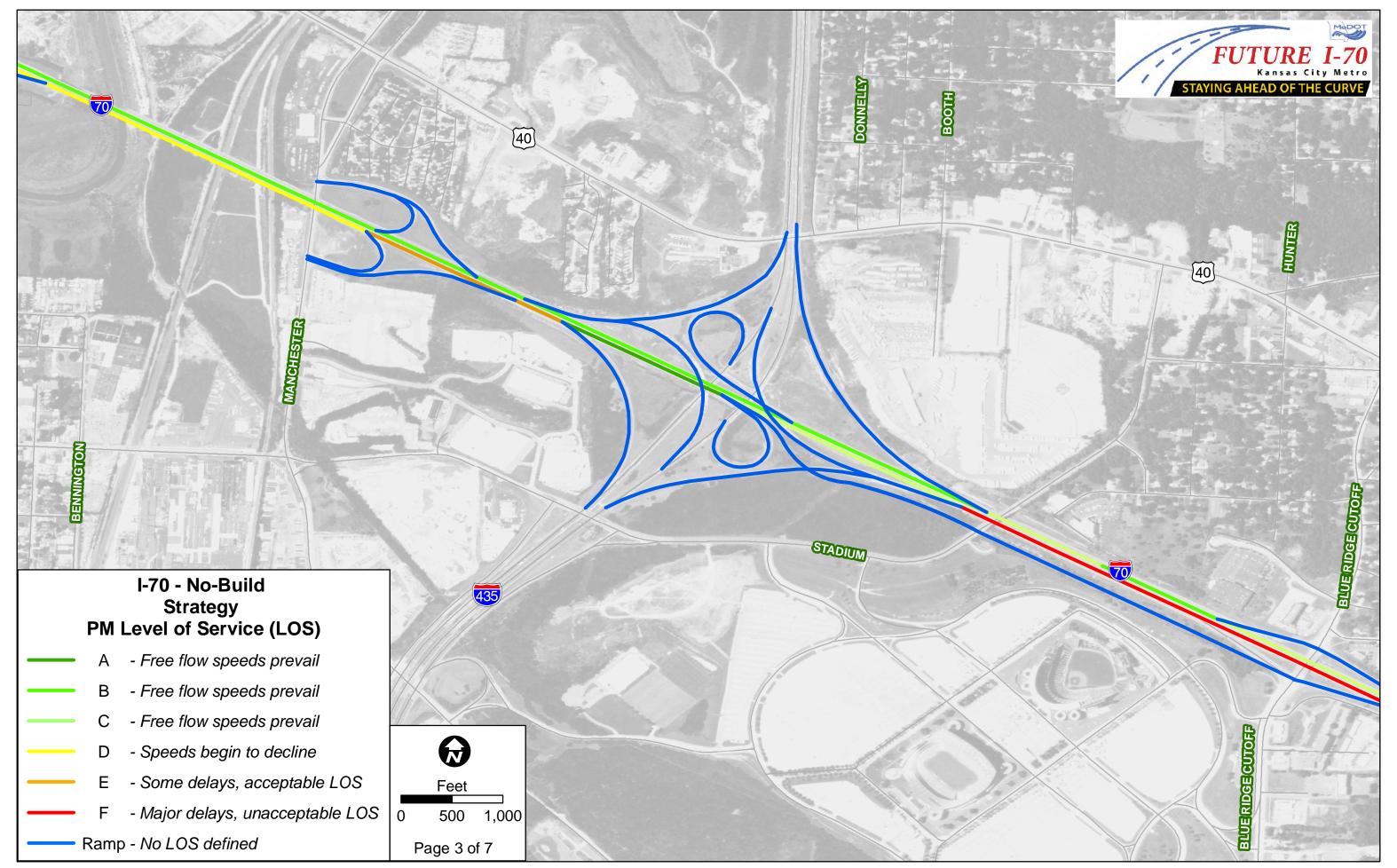
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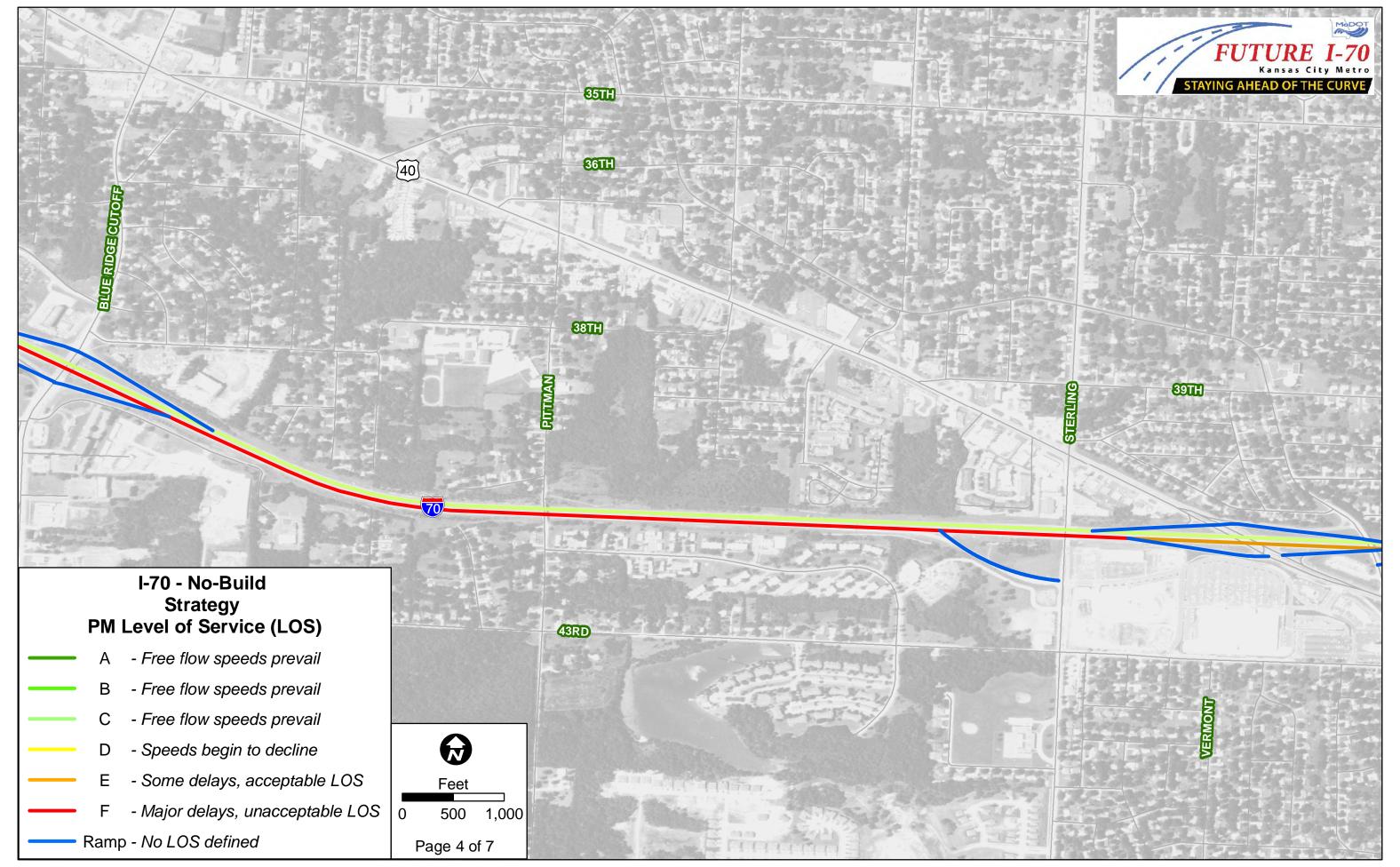


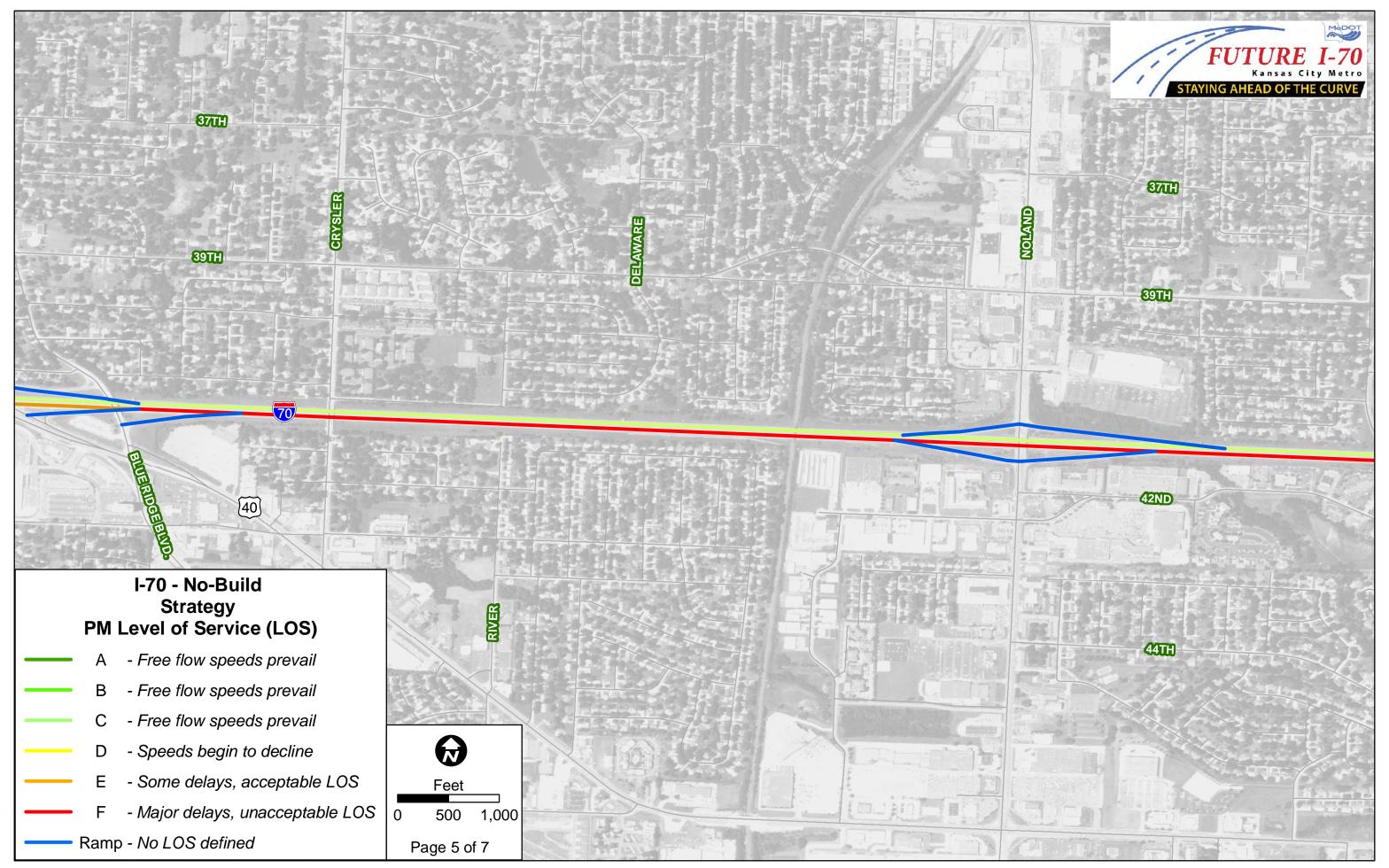


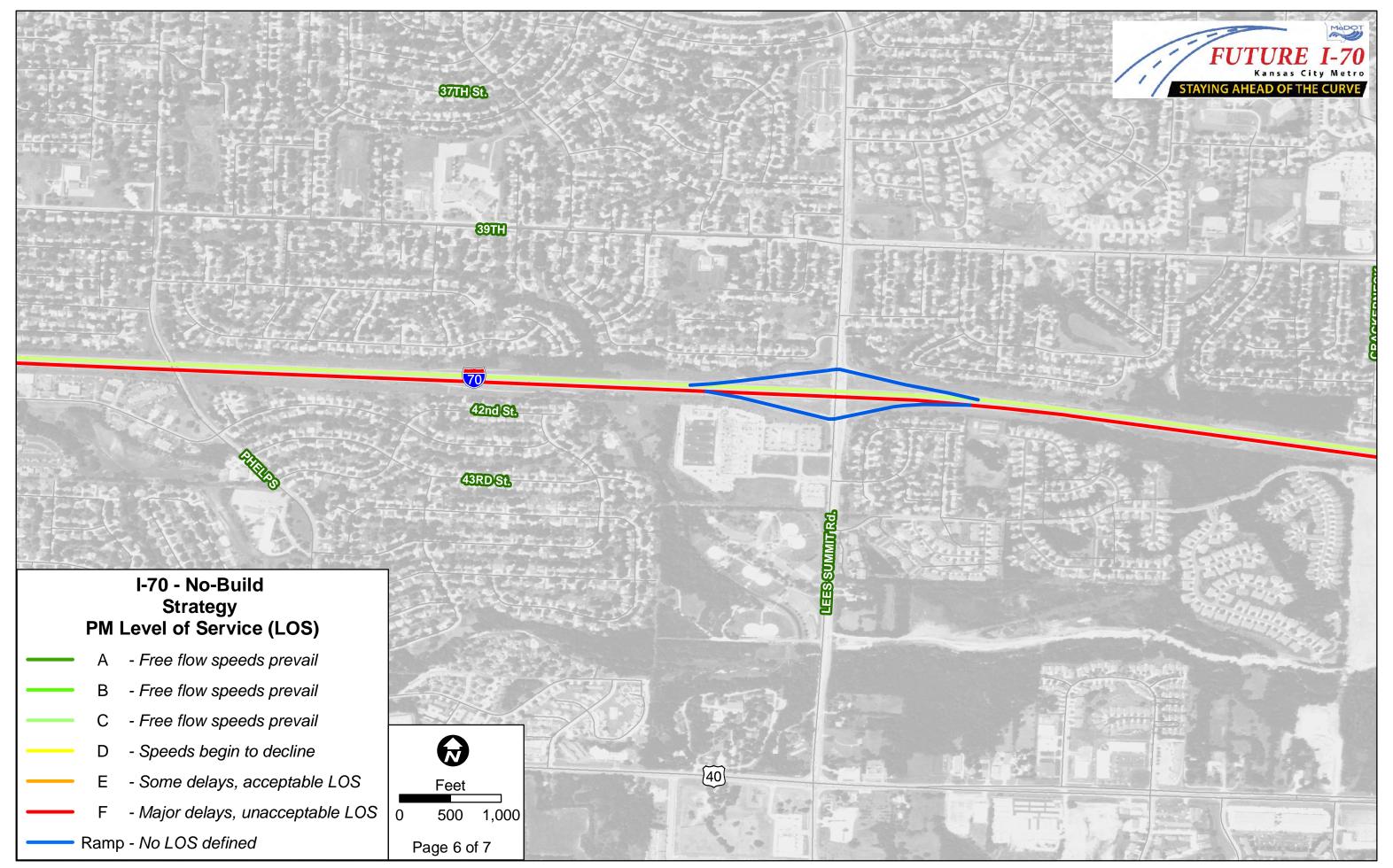


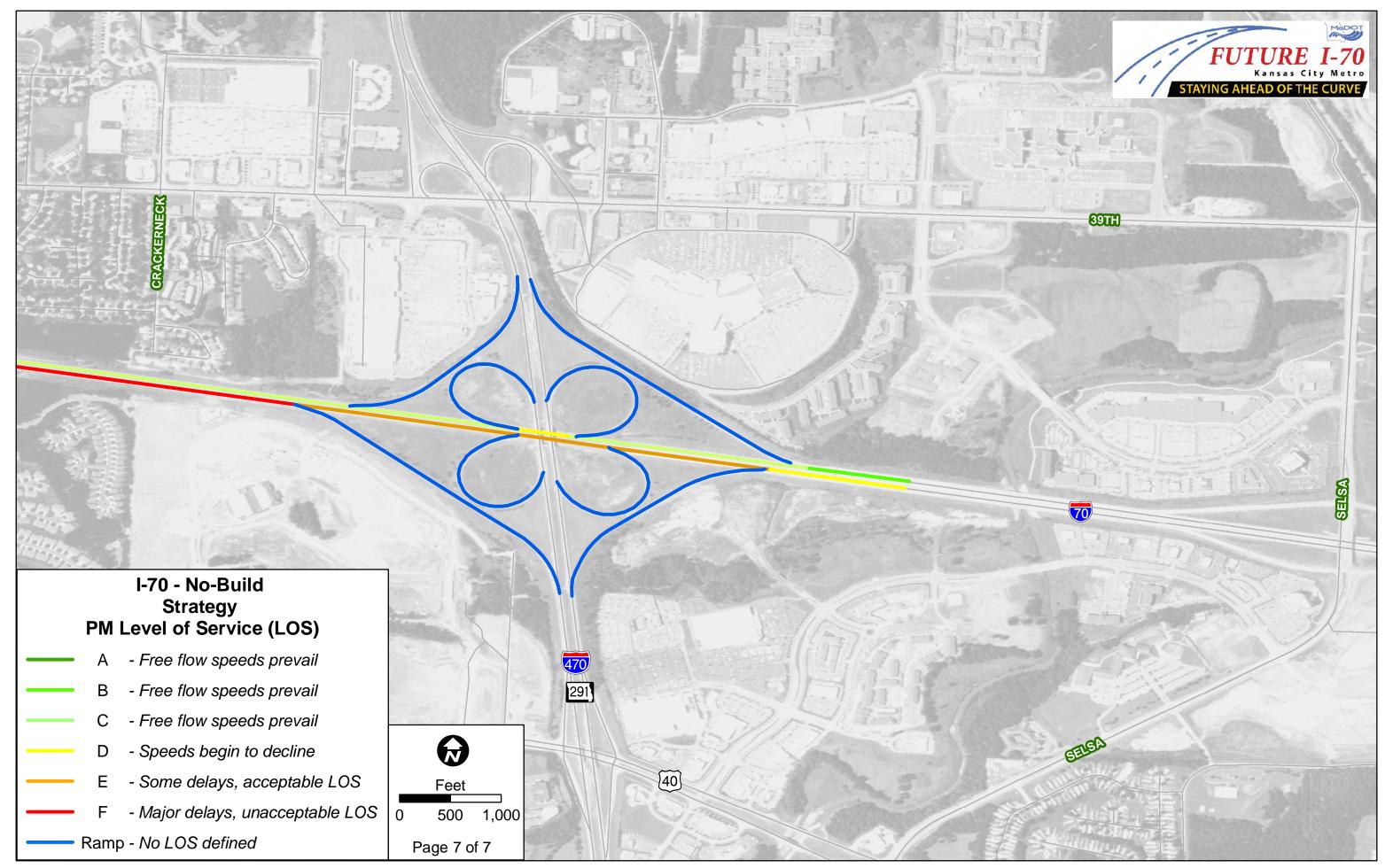


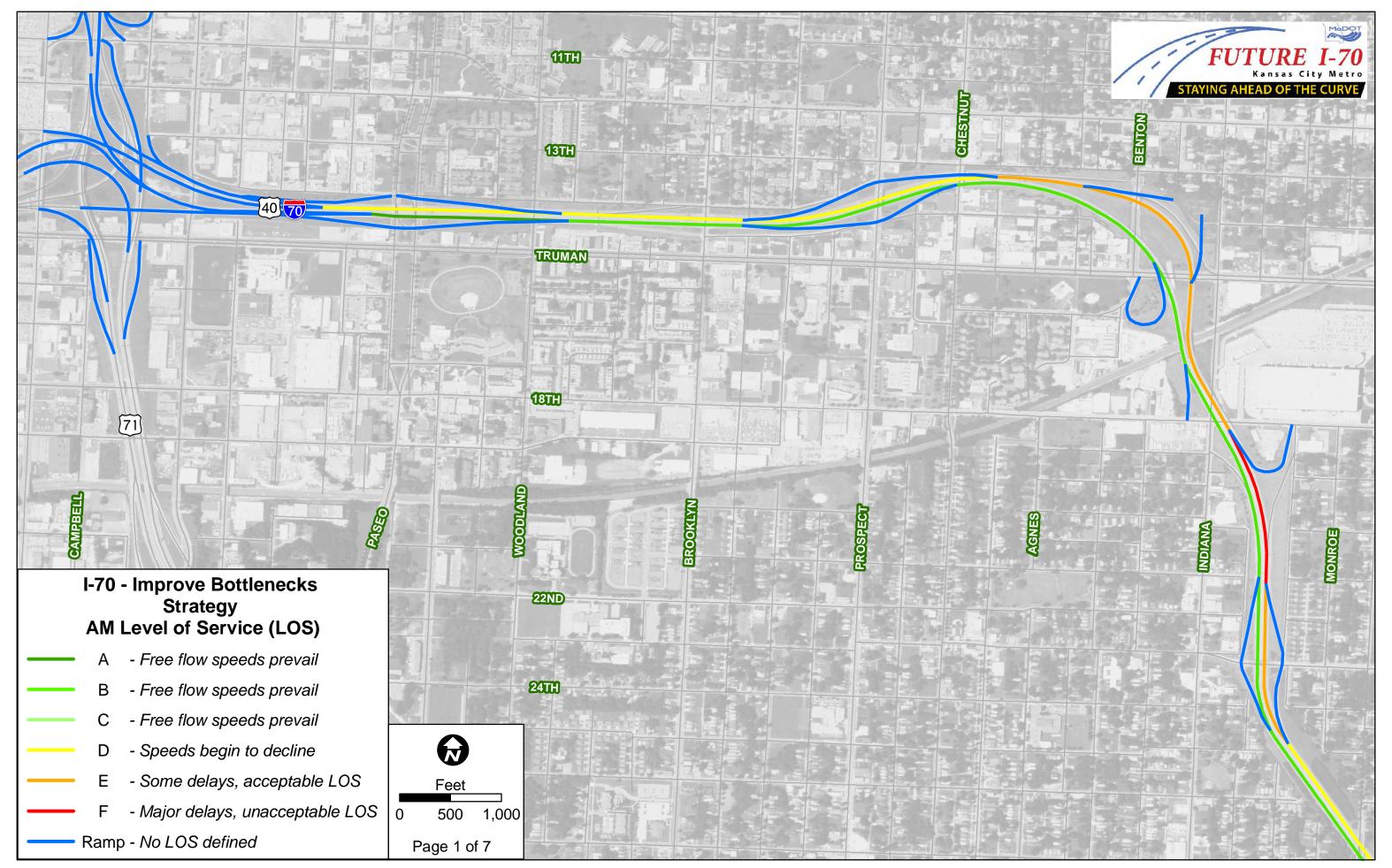


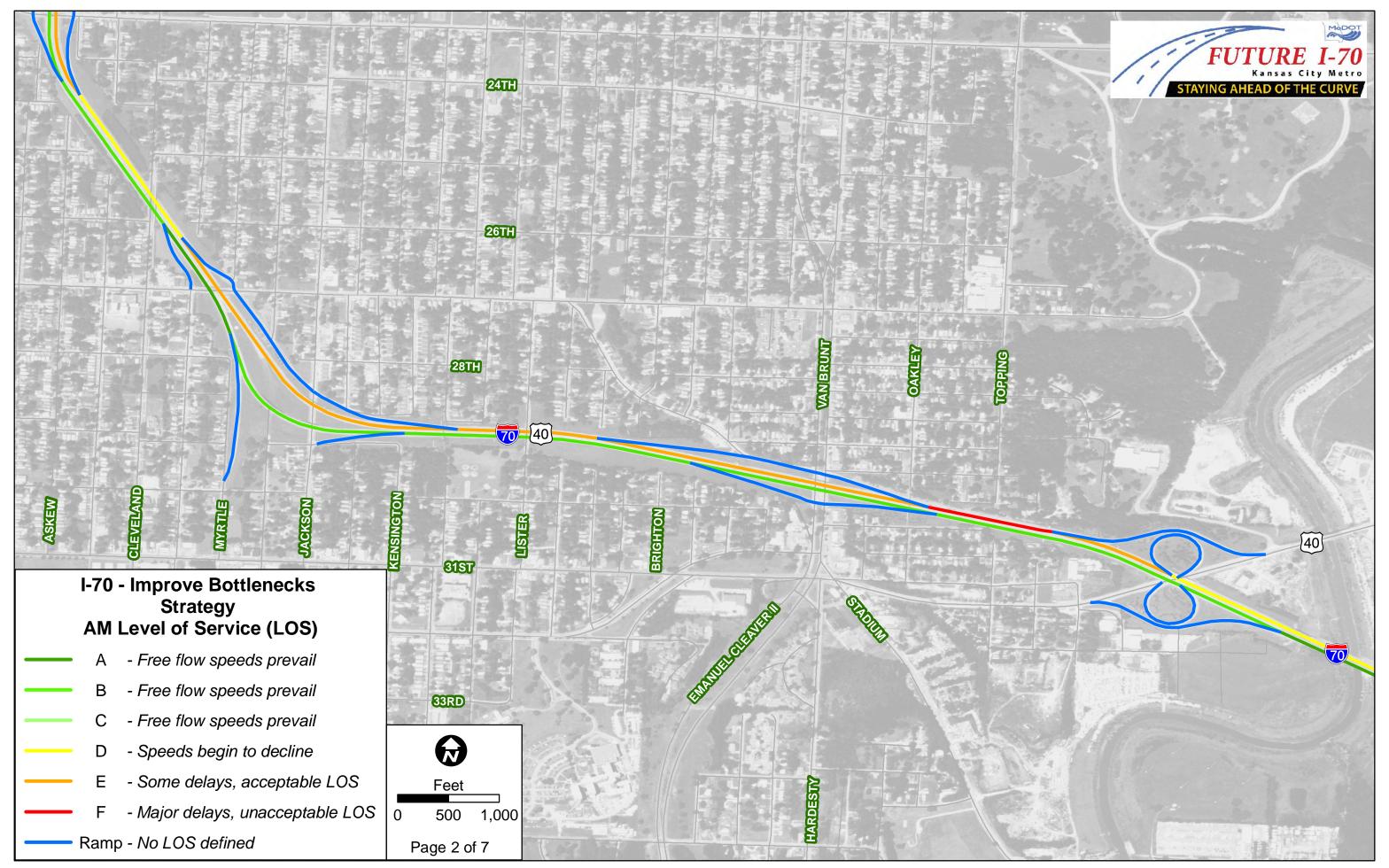


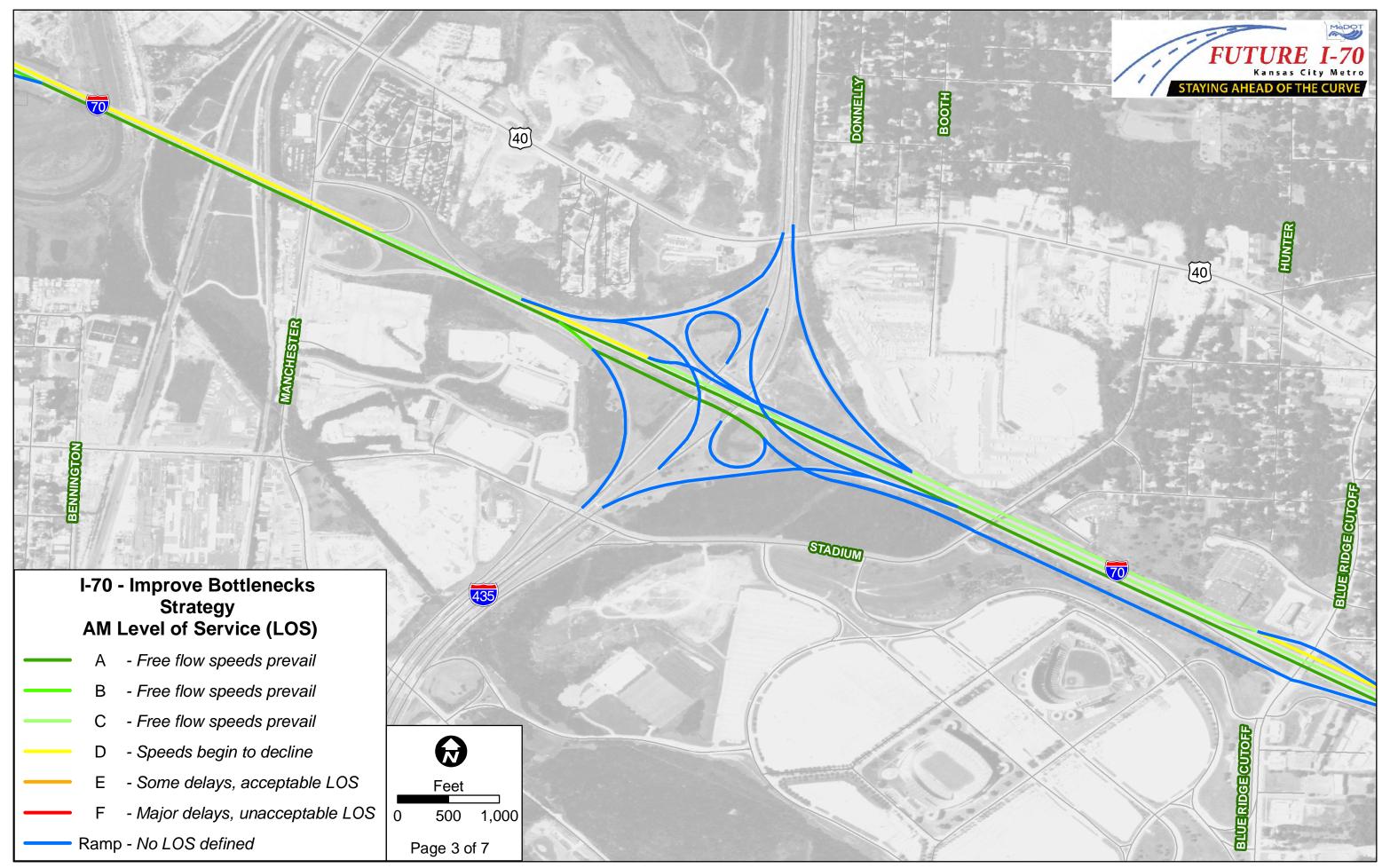


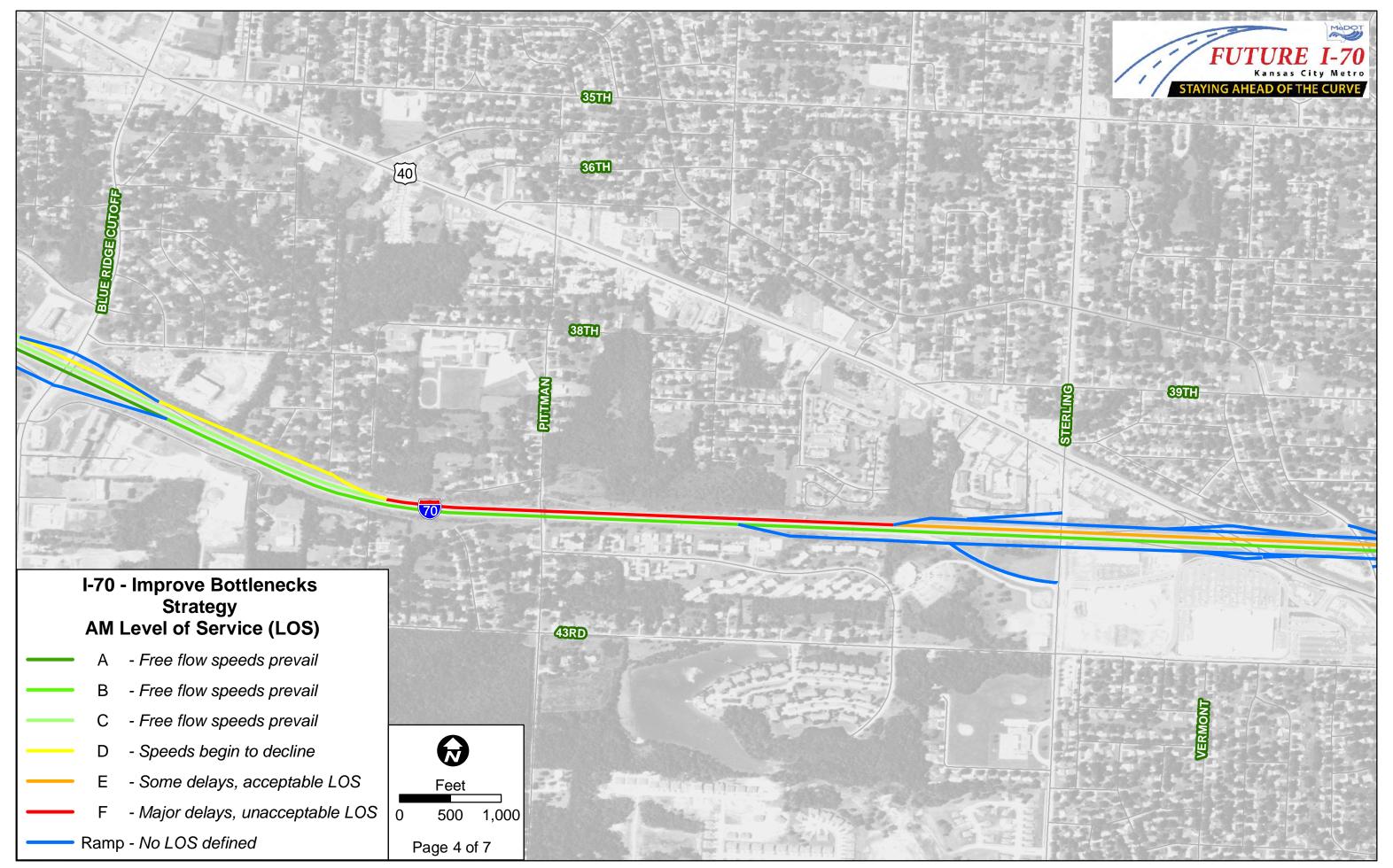


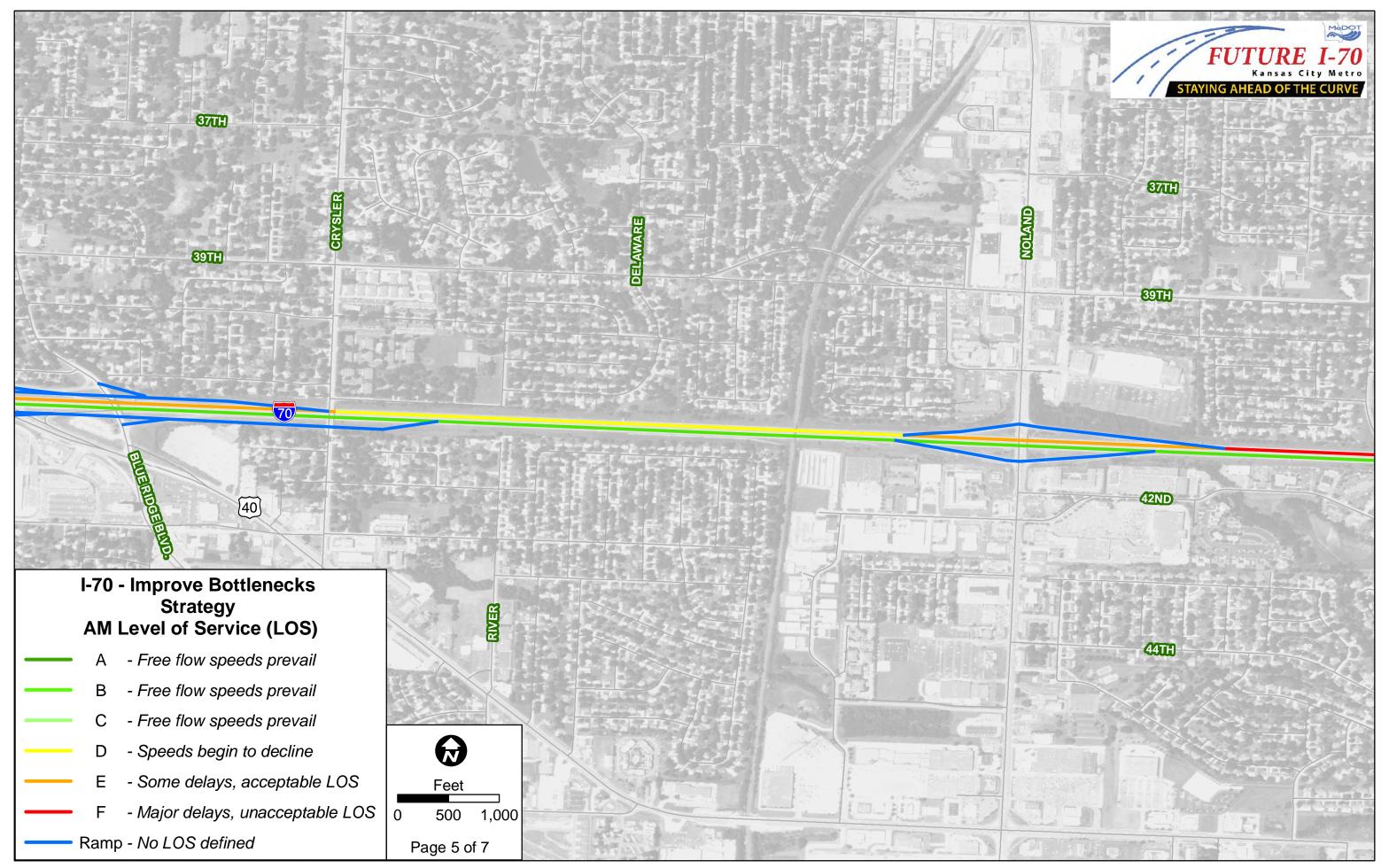


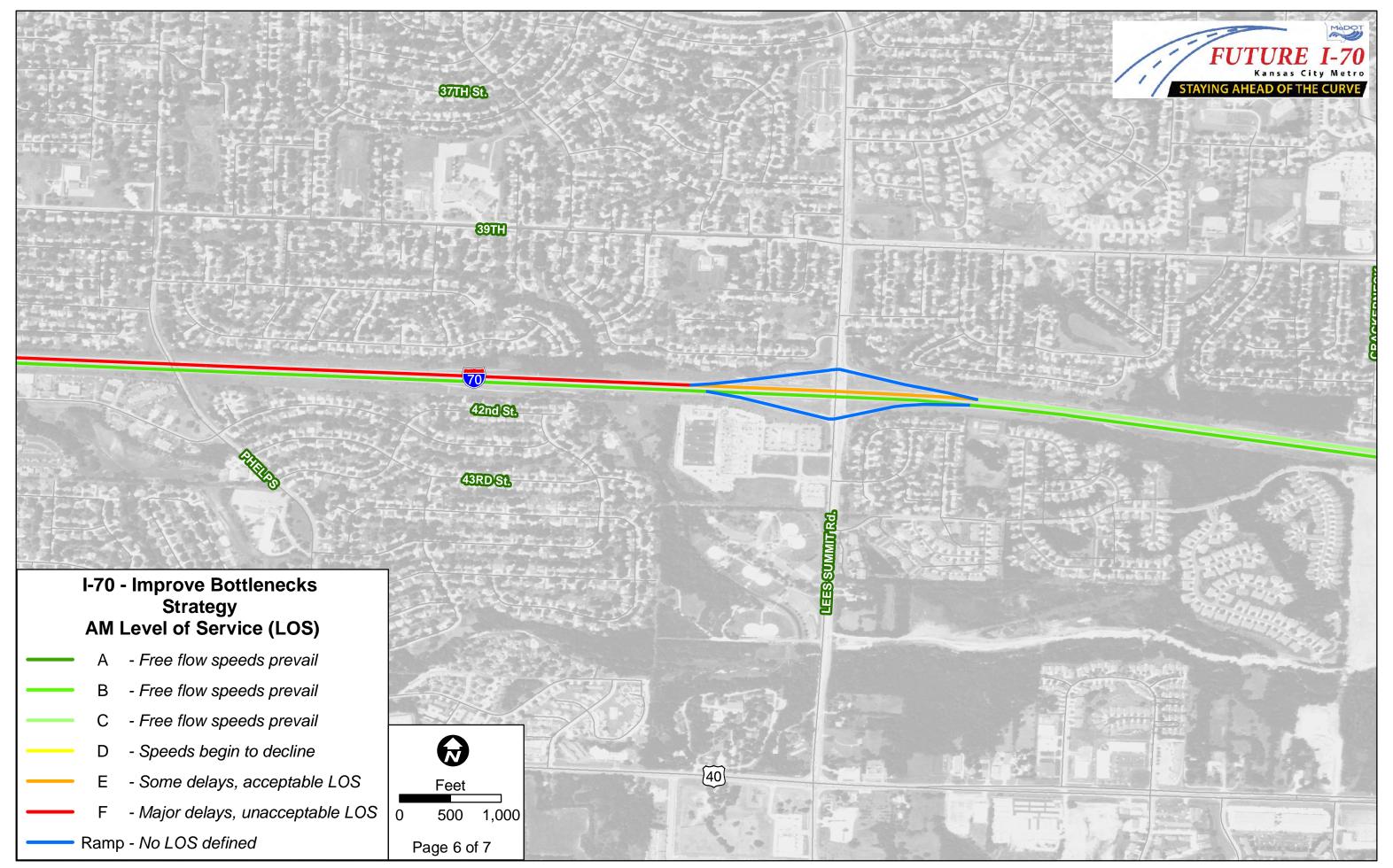




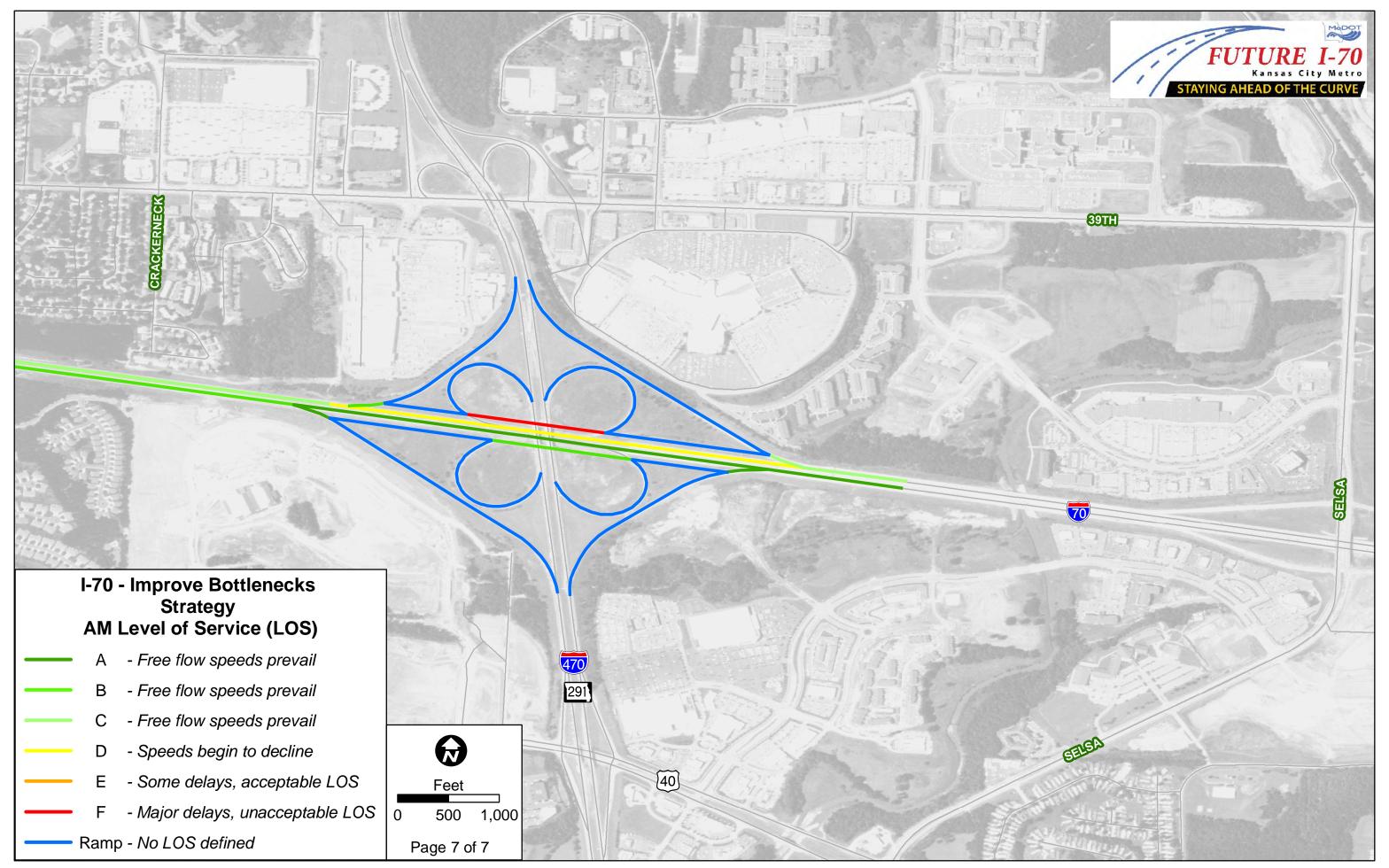


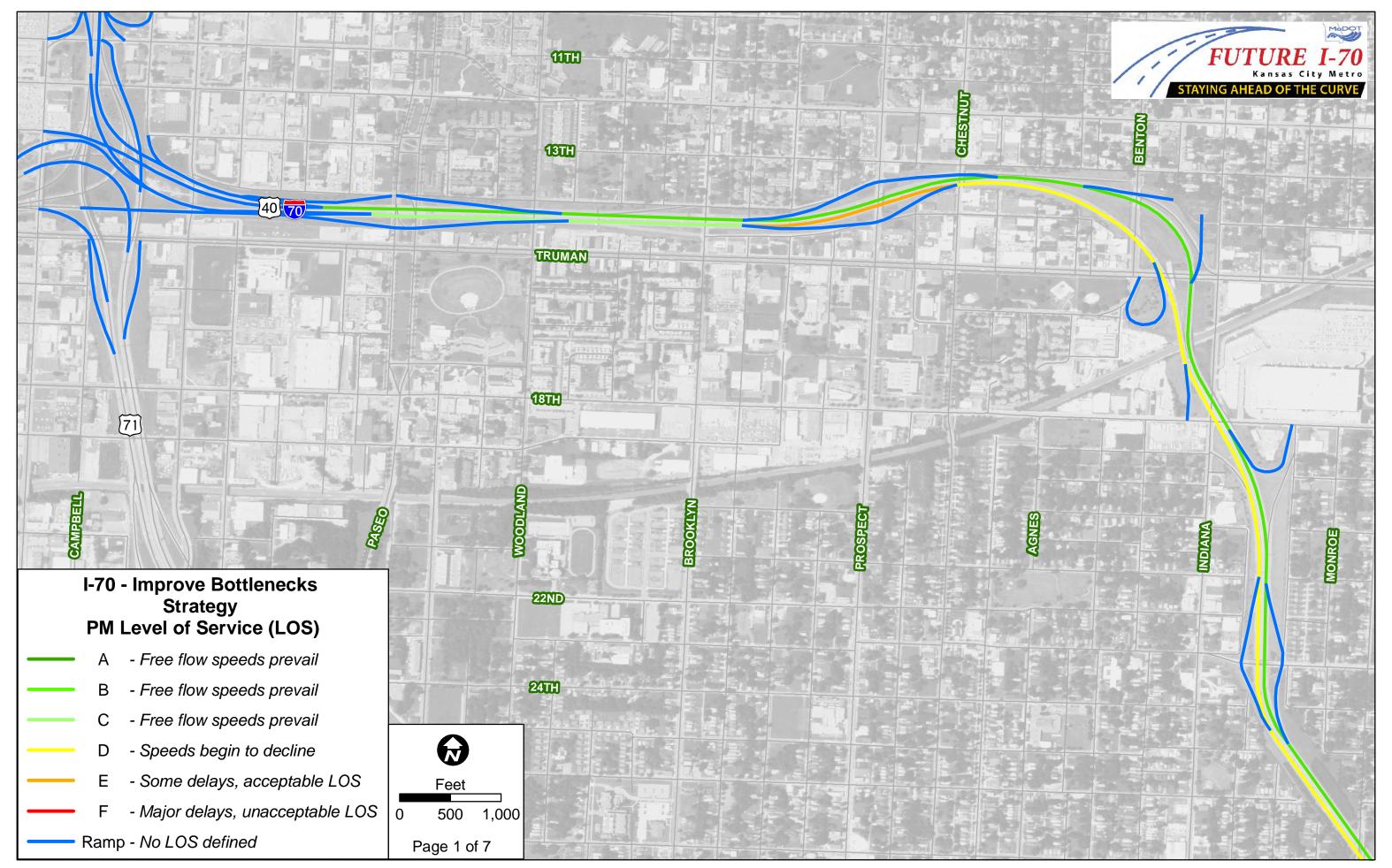




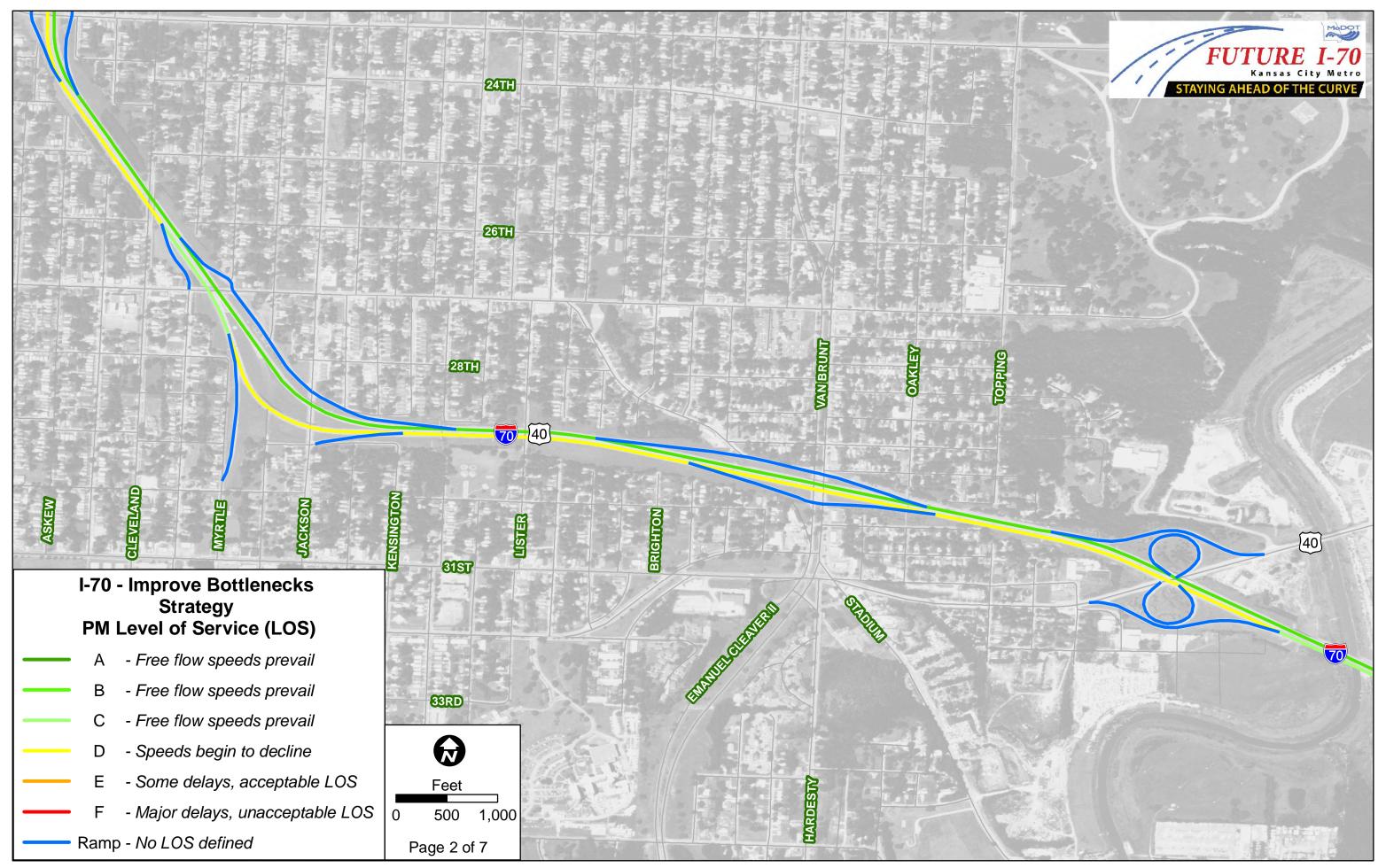


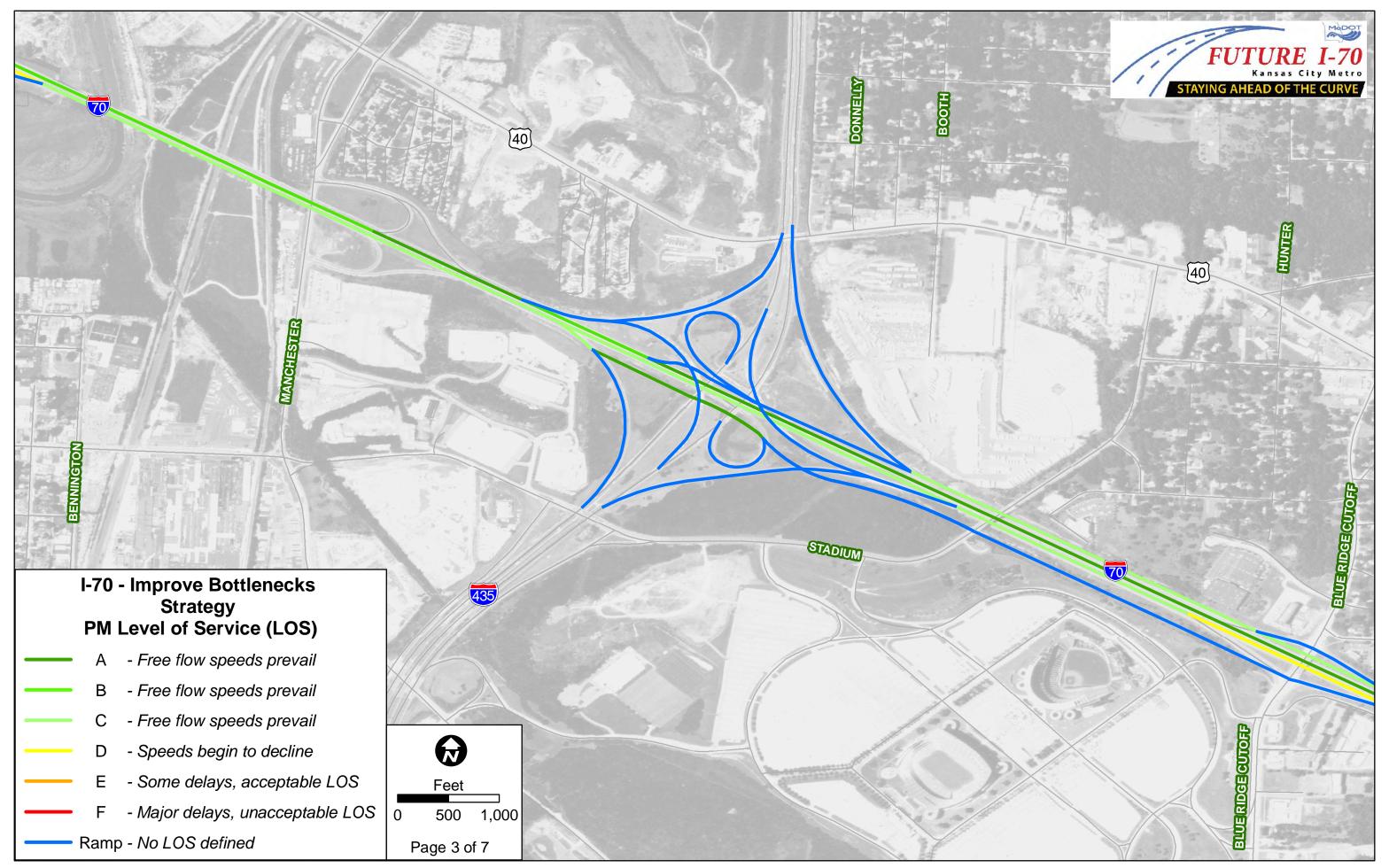
Level of Service Analysis

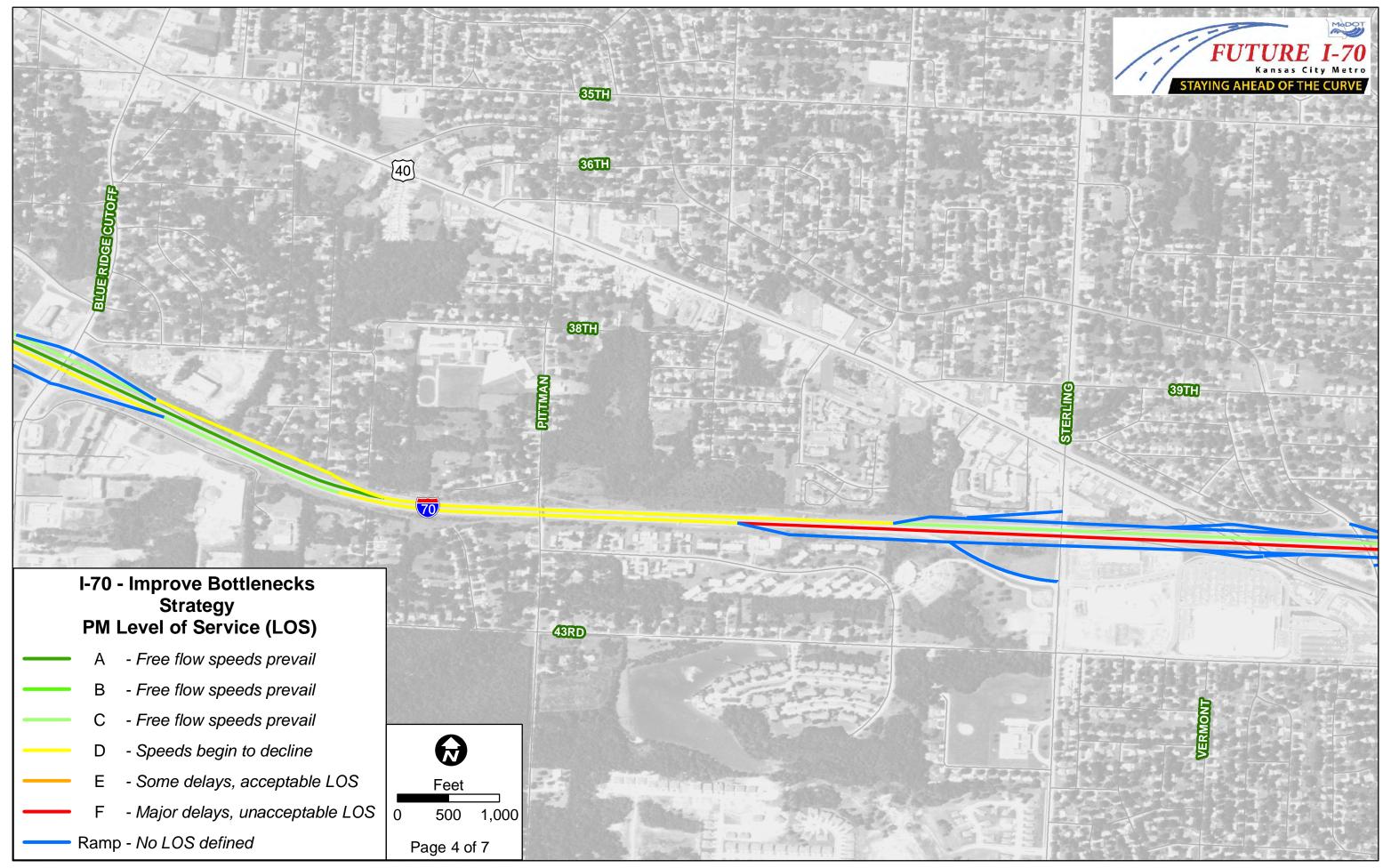


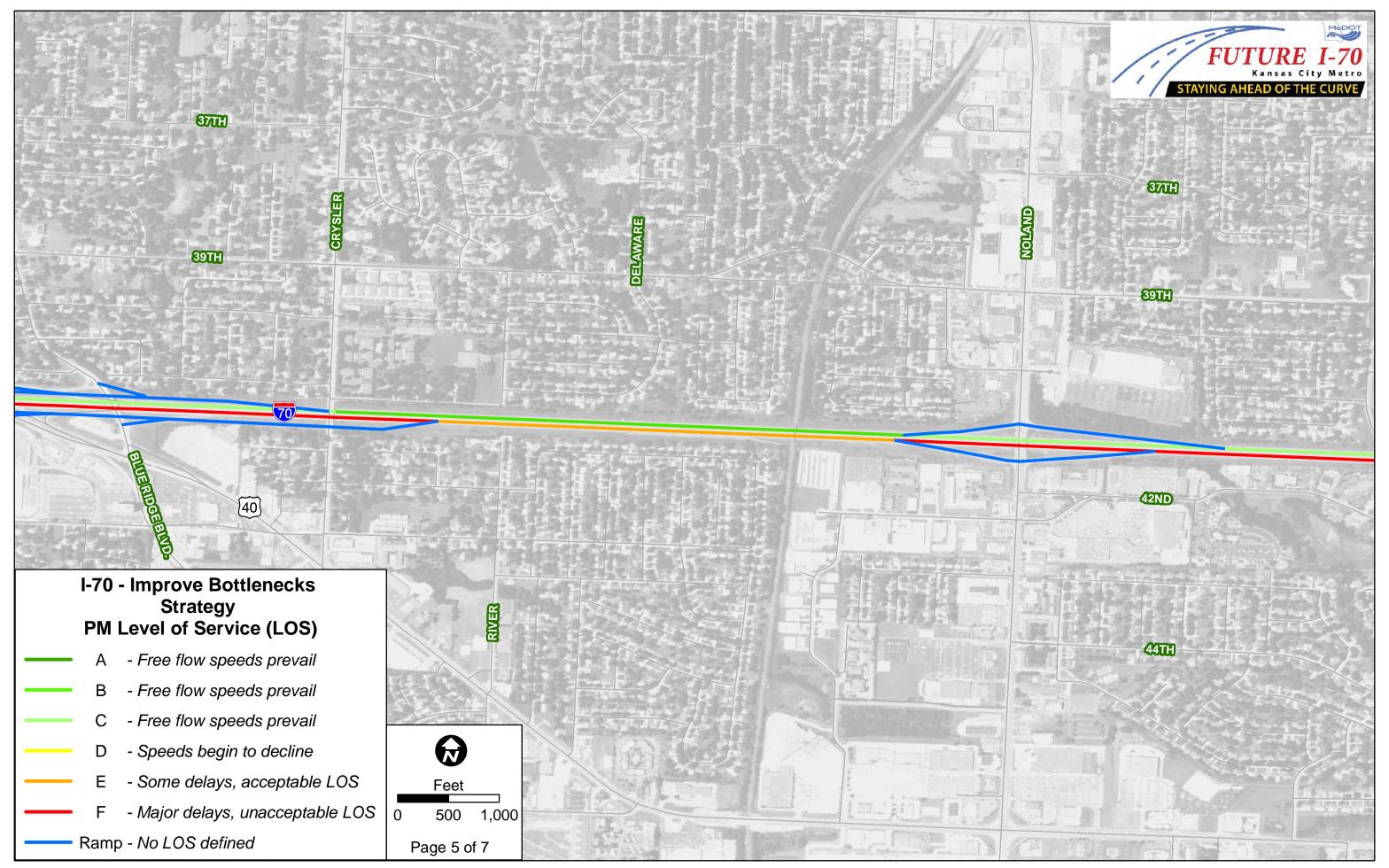


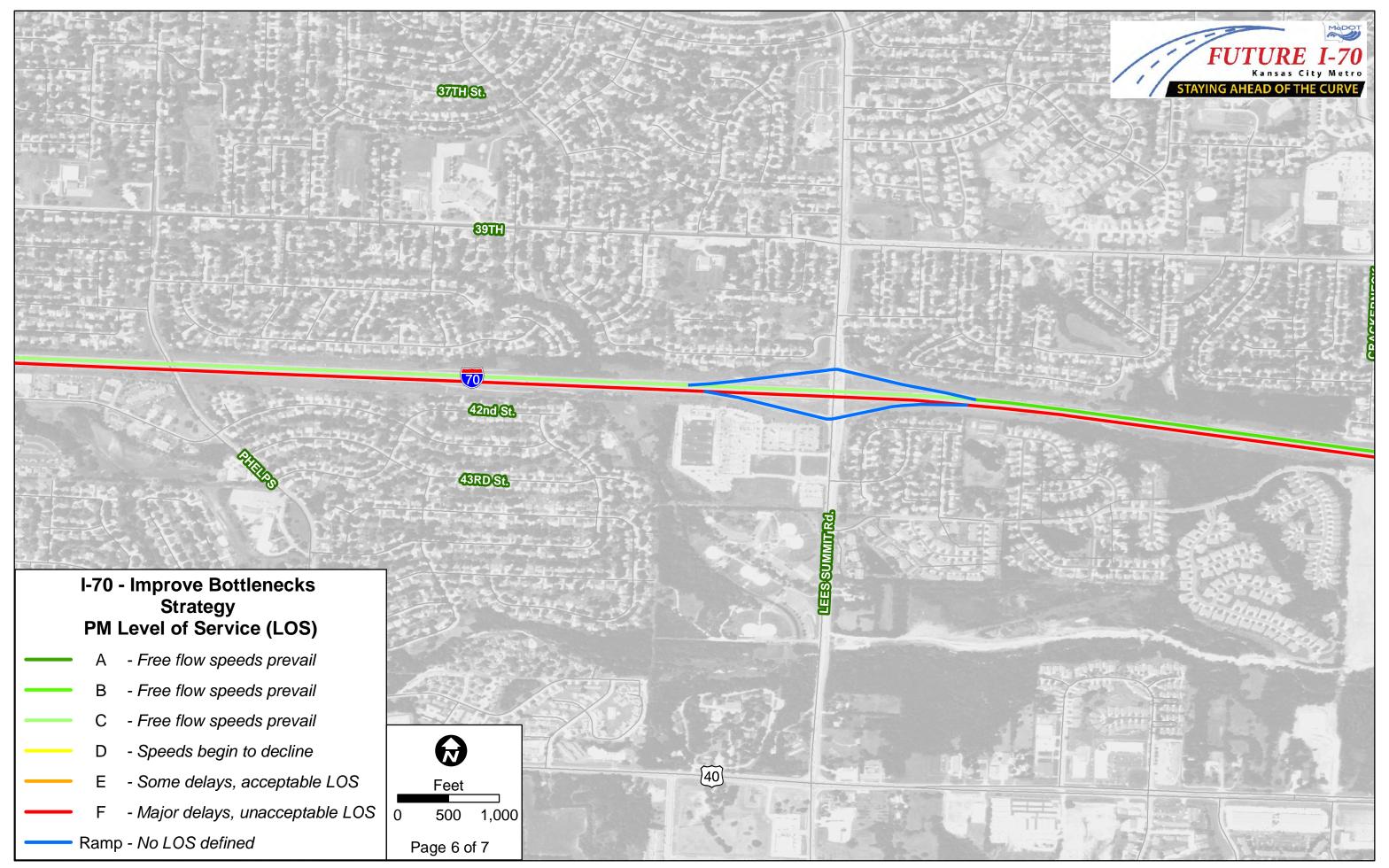
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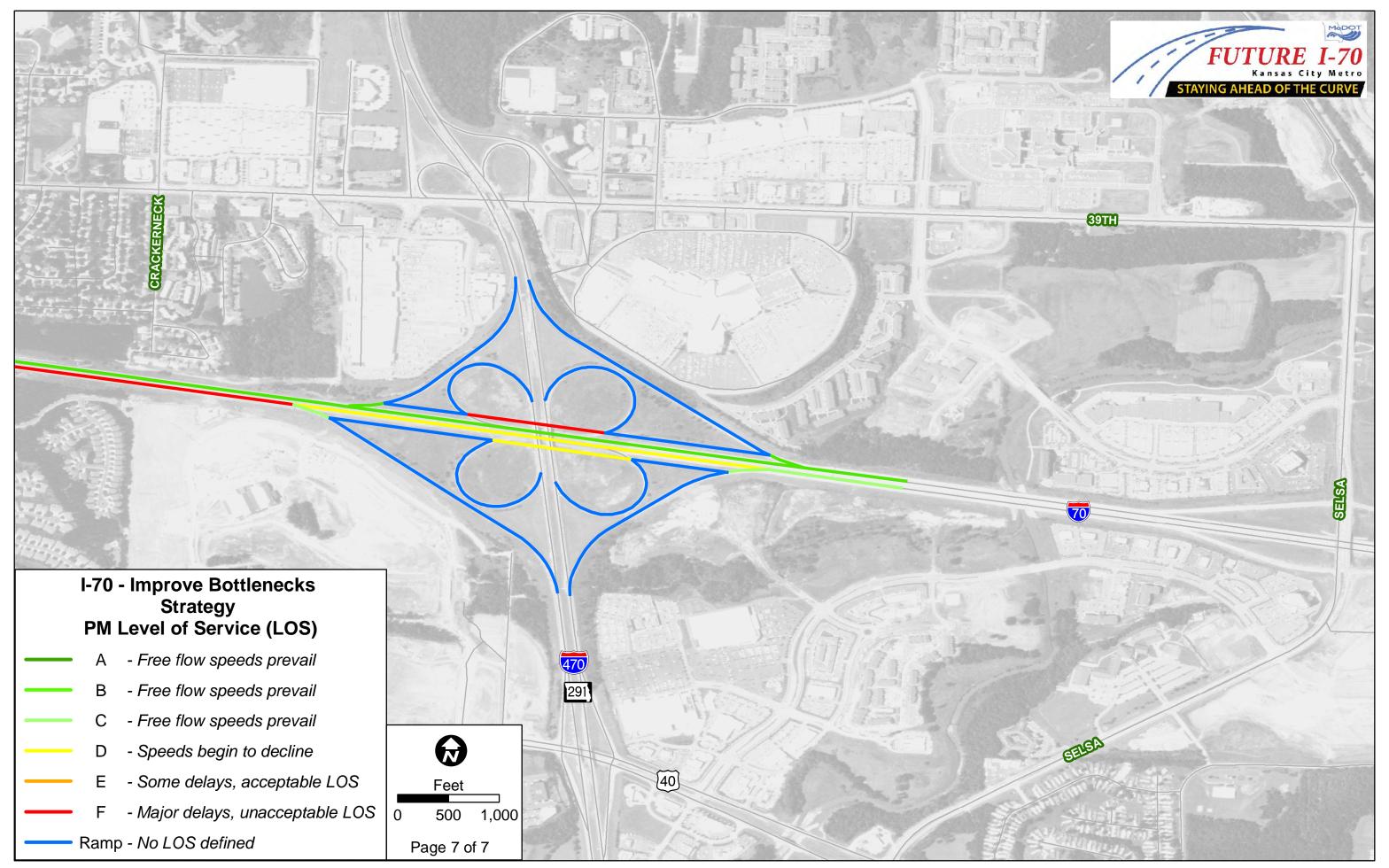


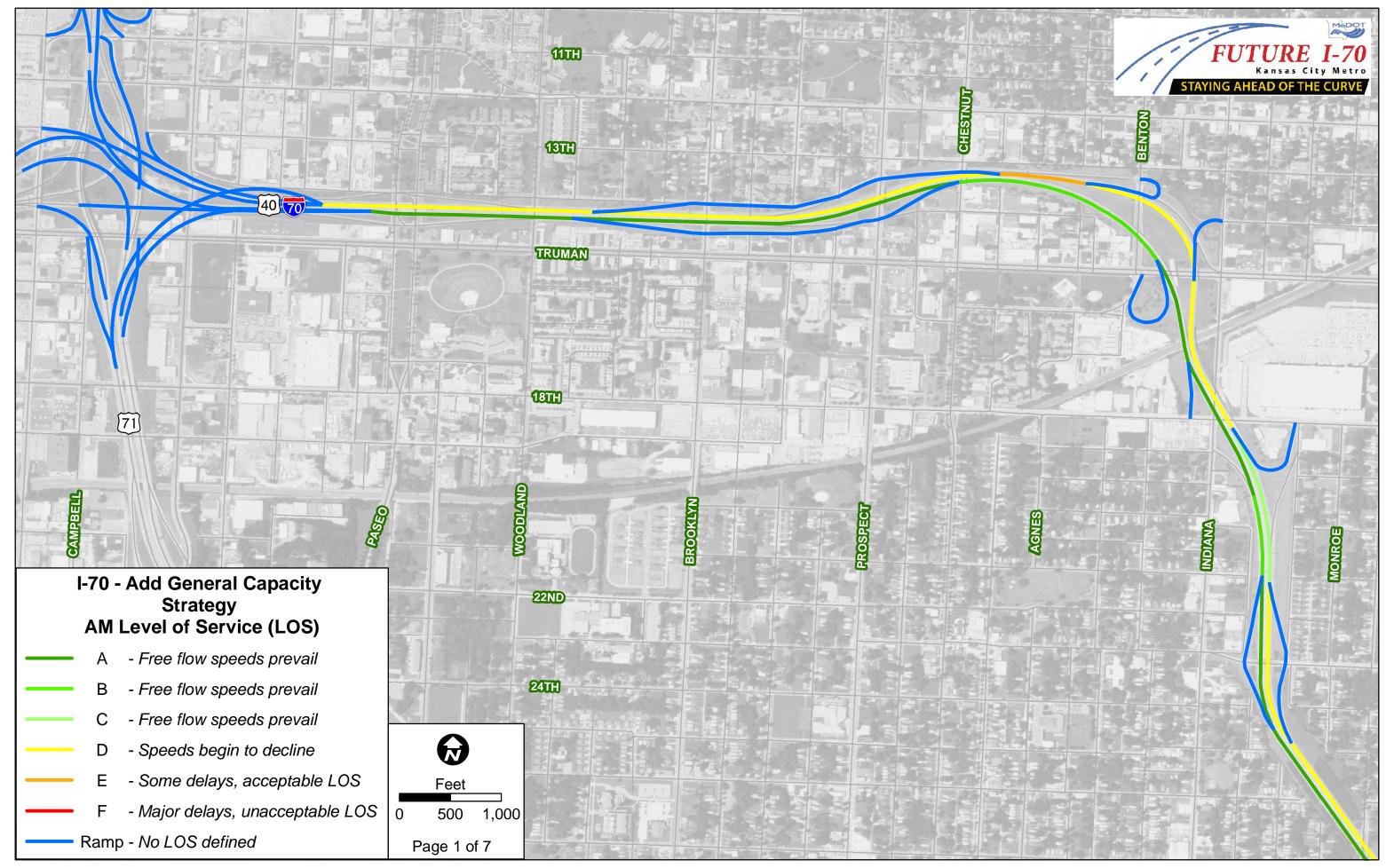




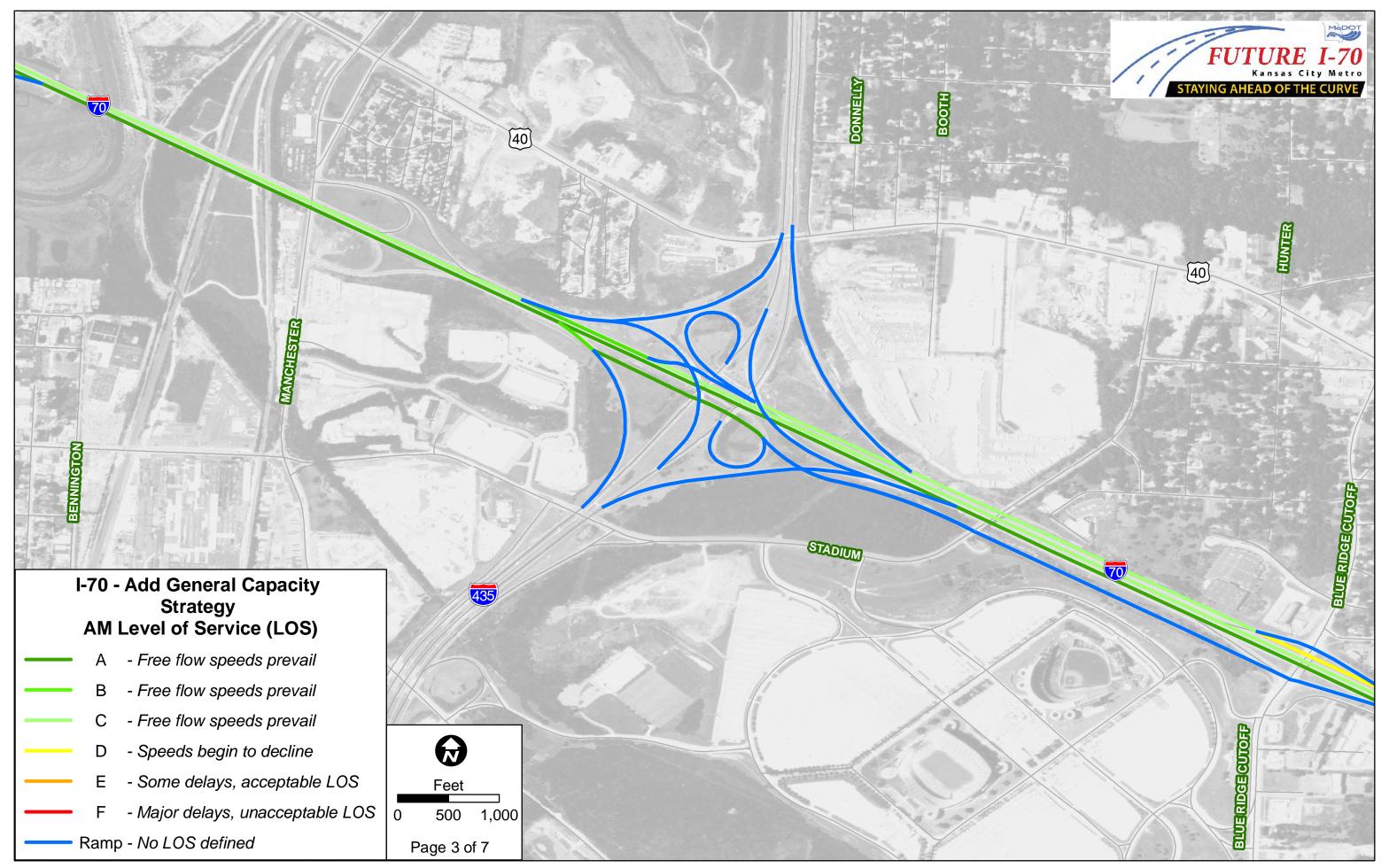


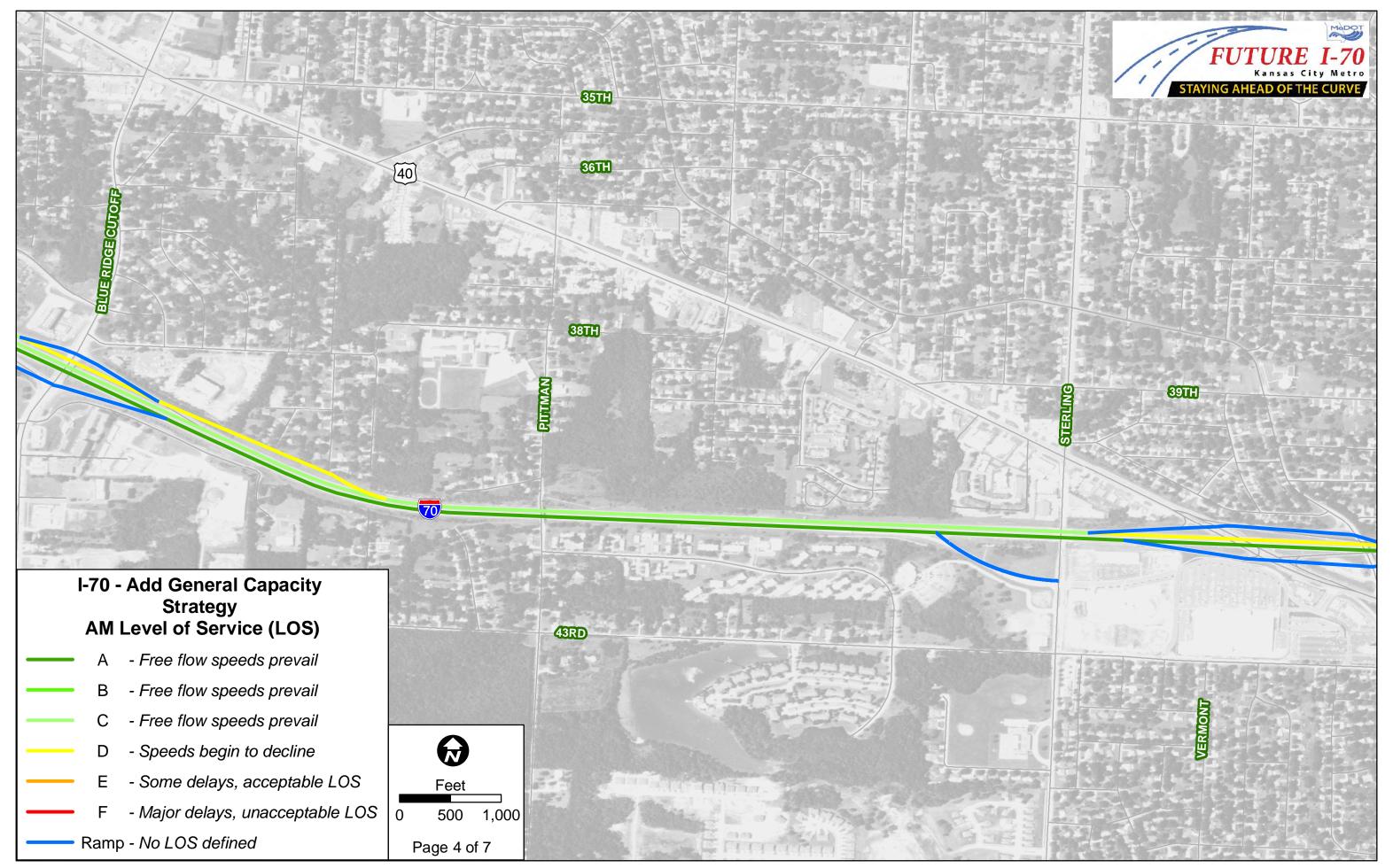
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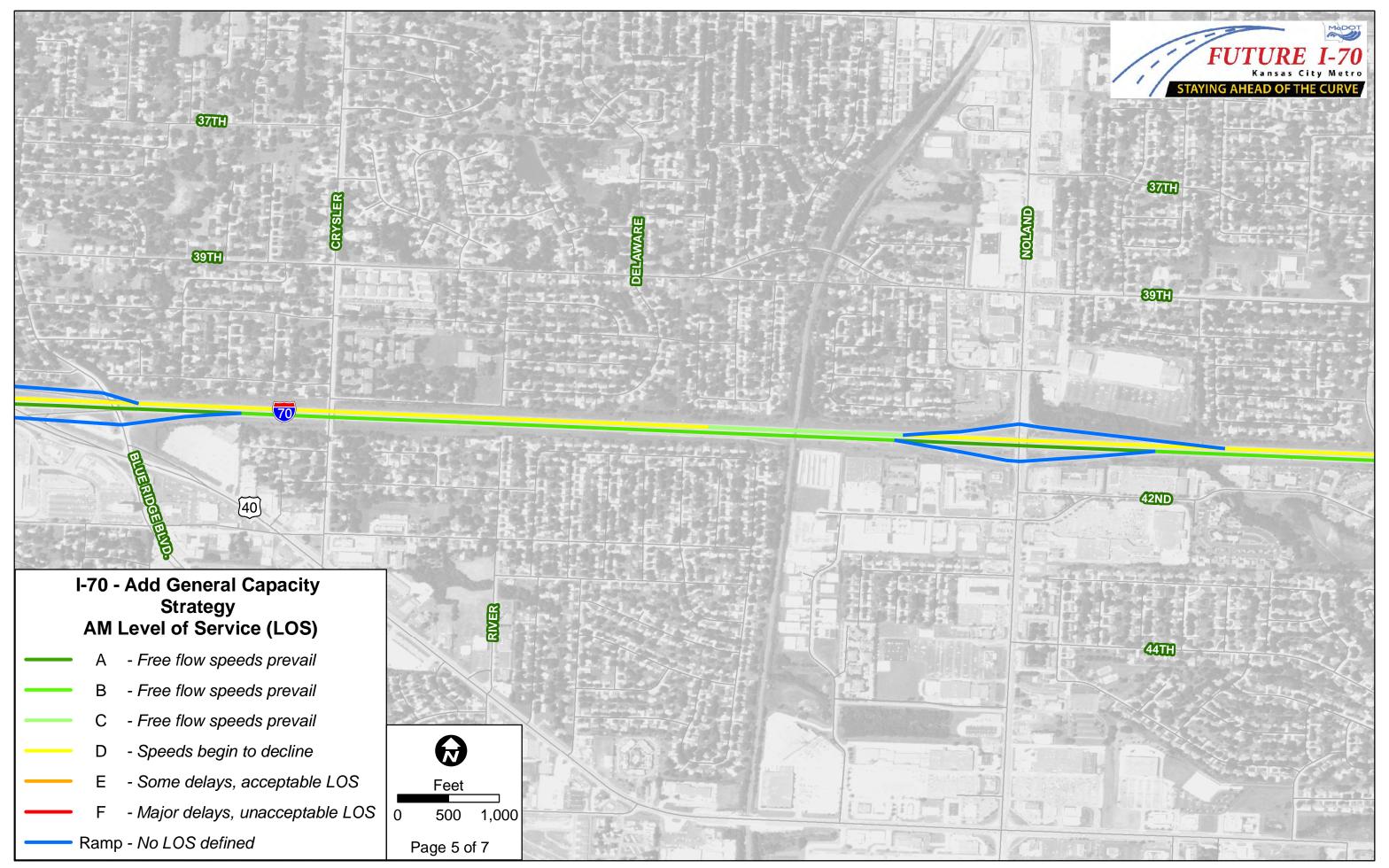


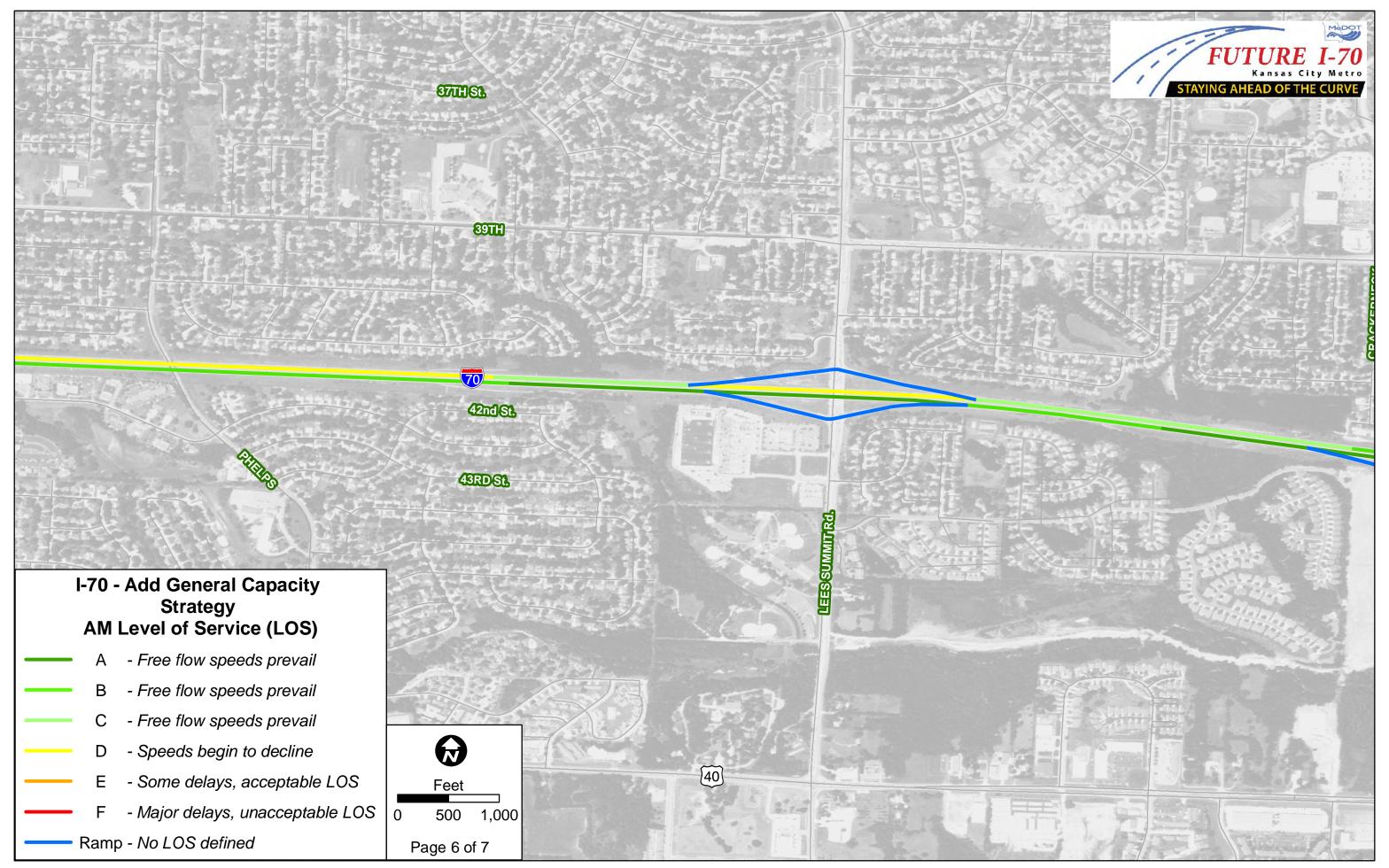




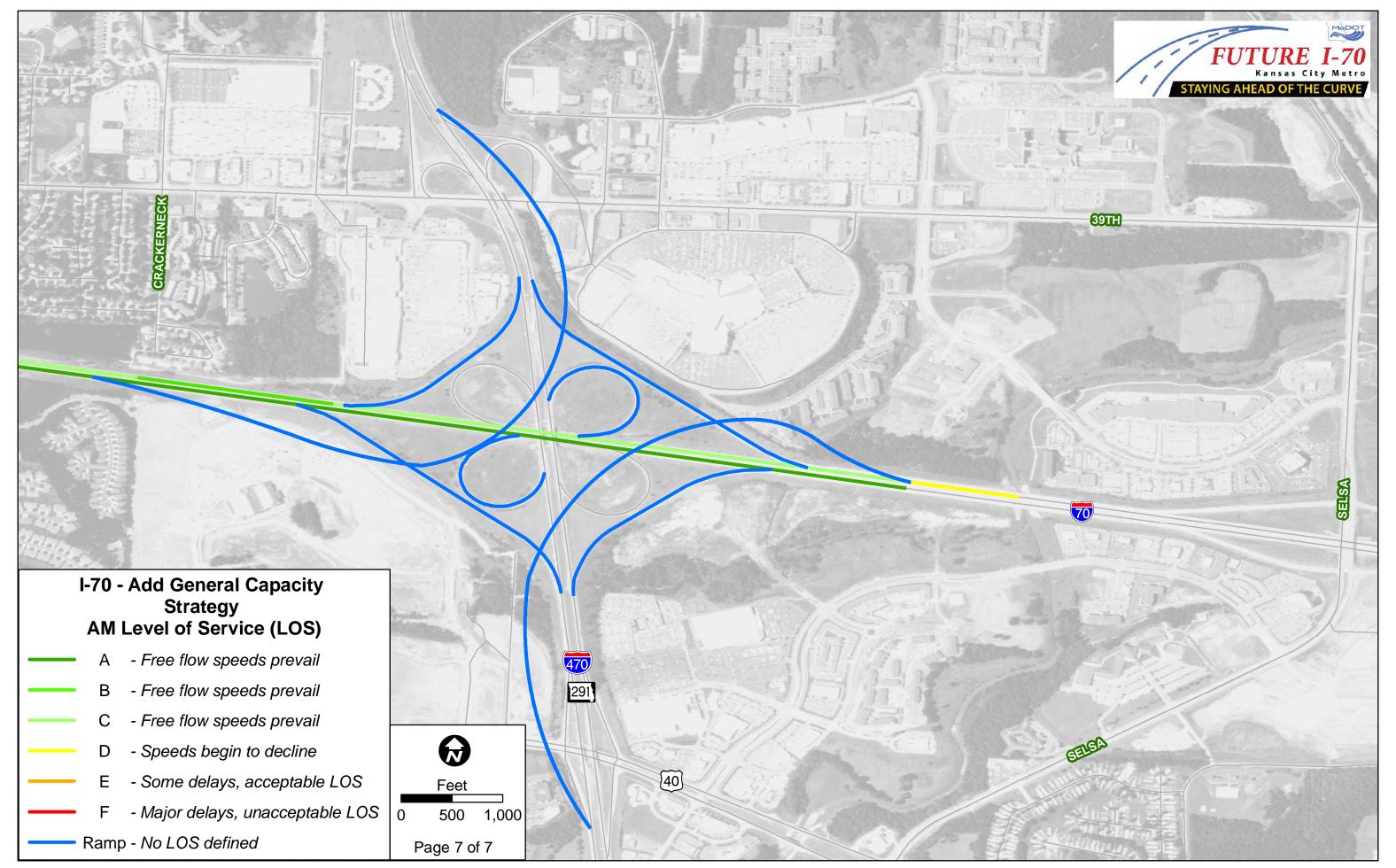


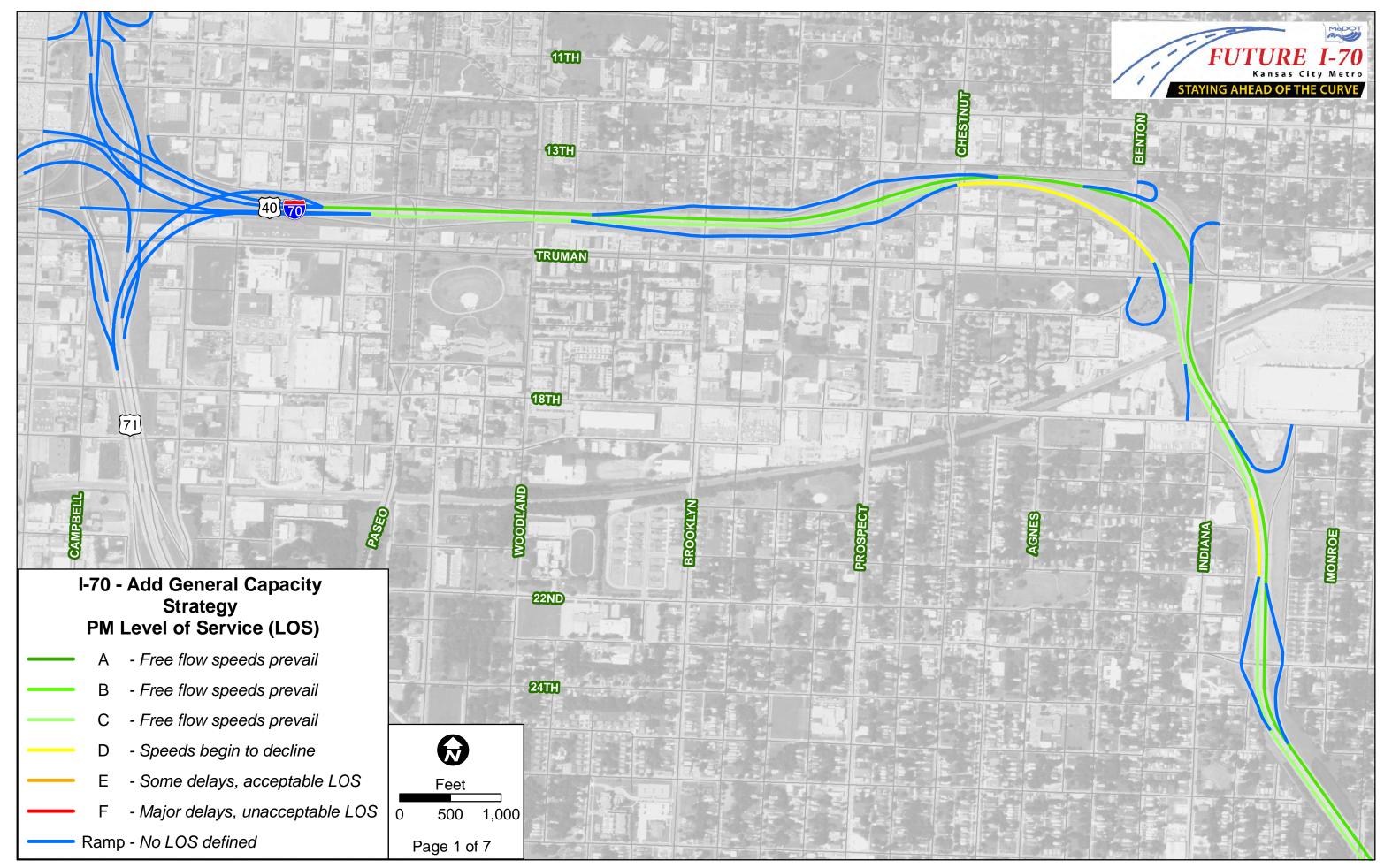


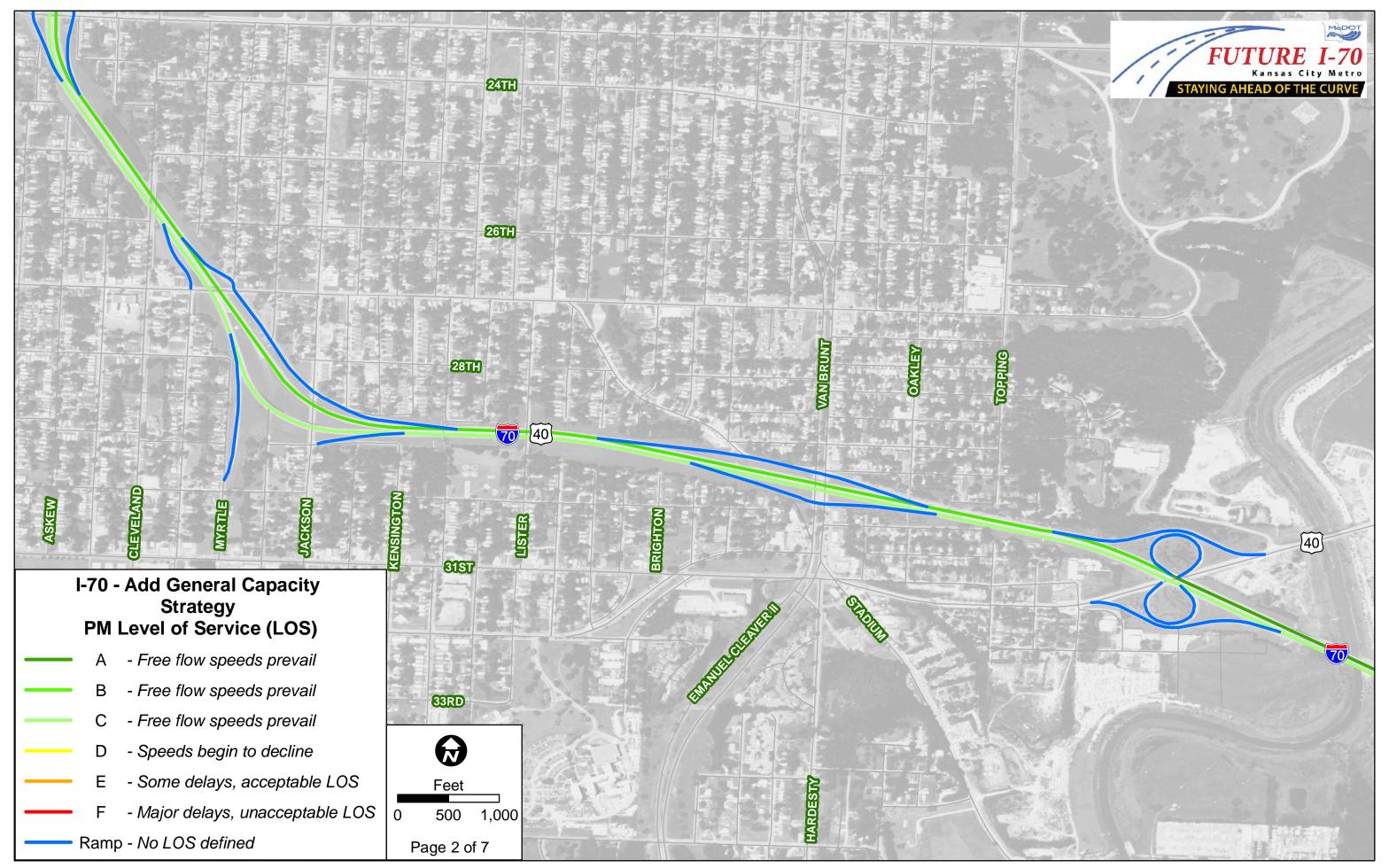


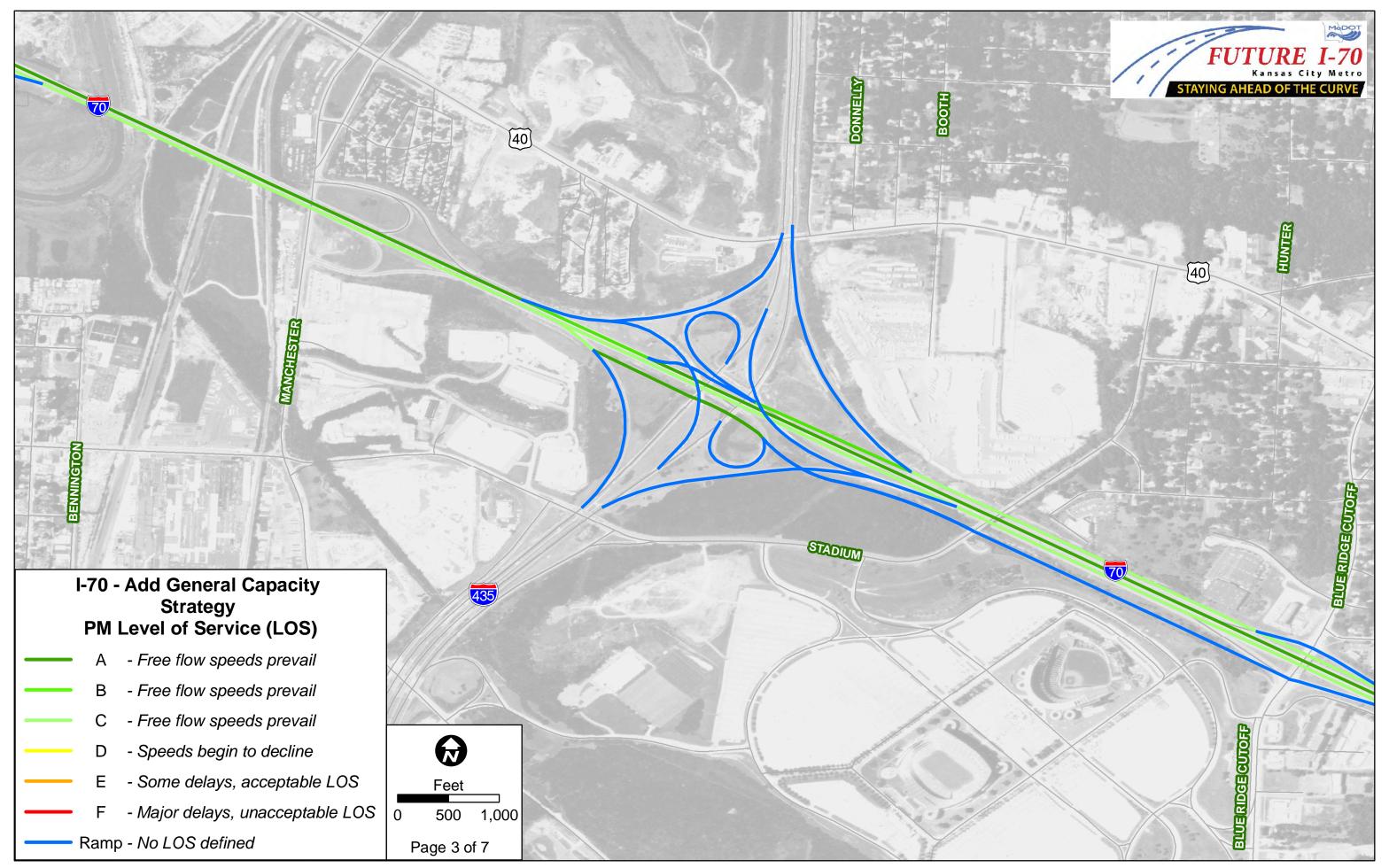


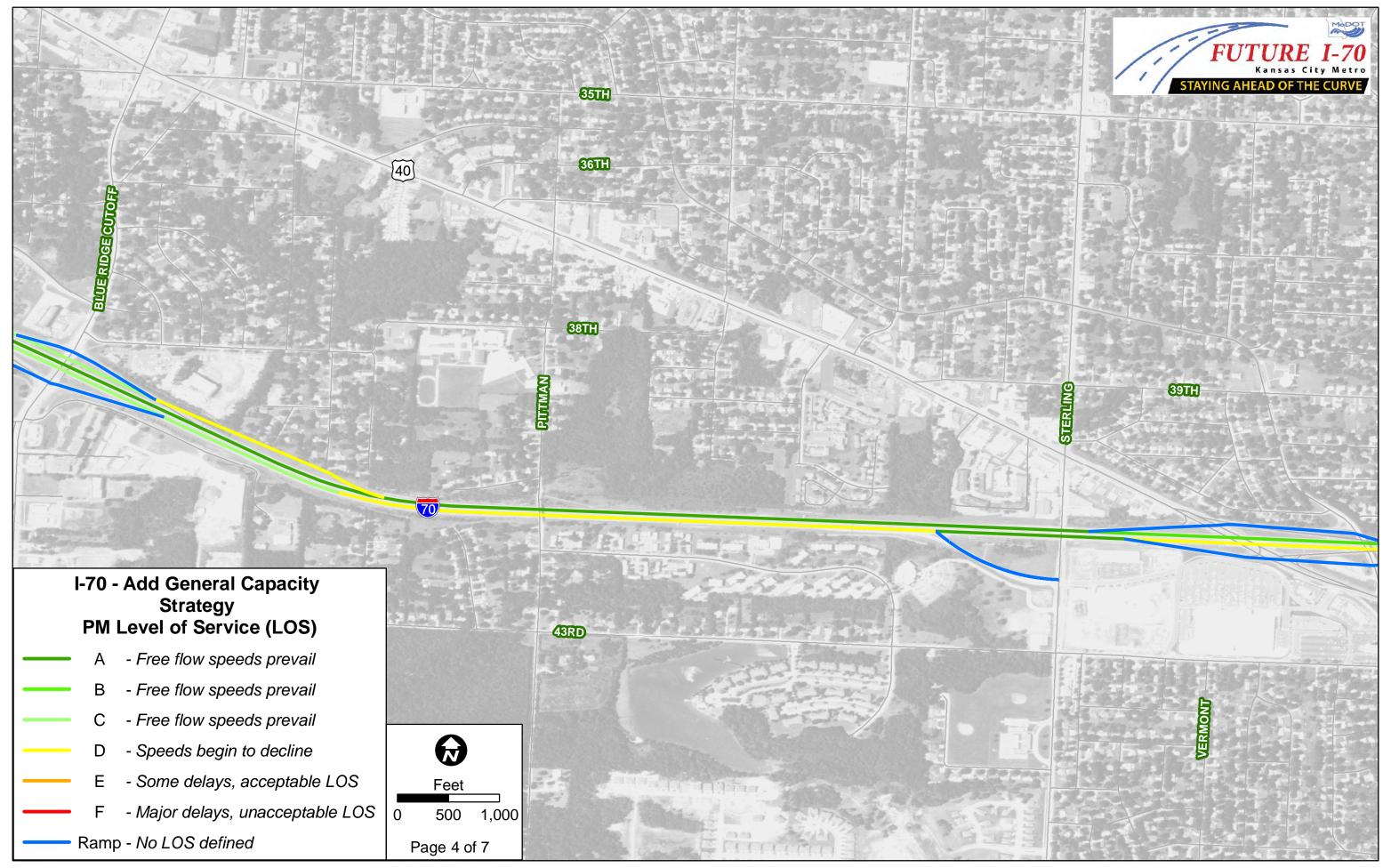
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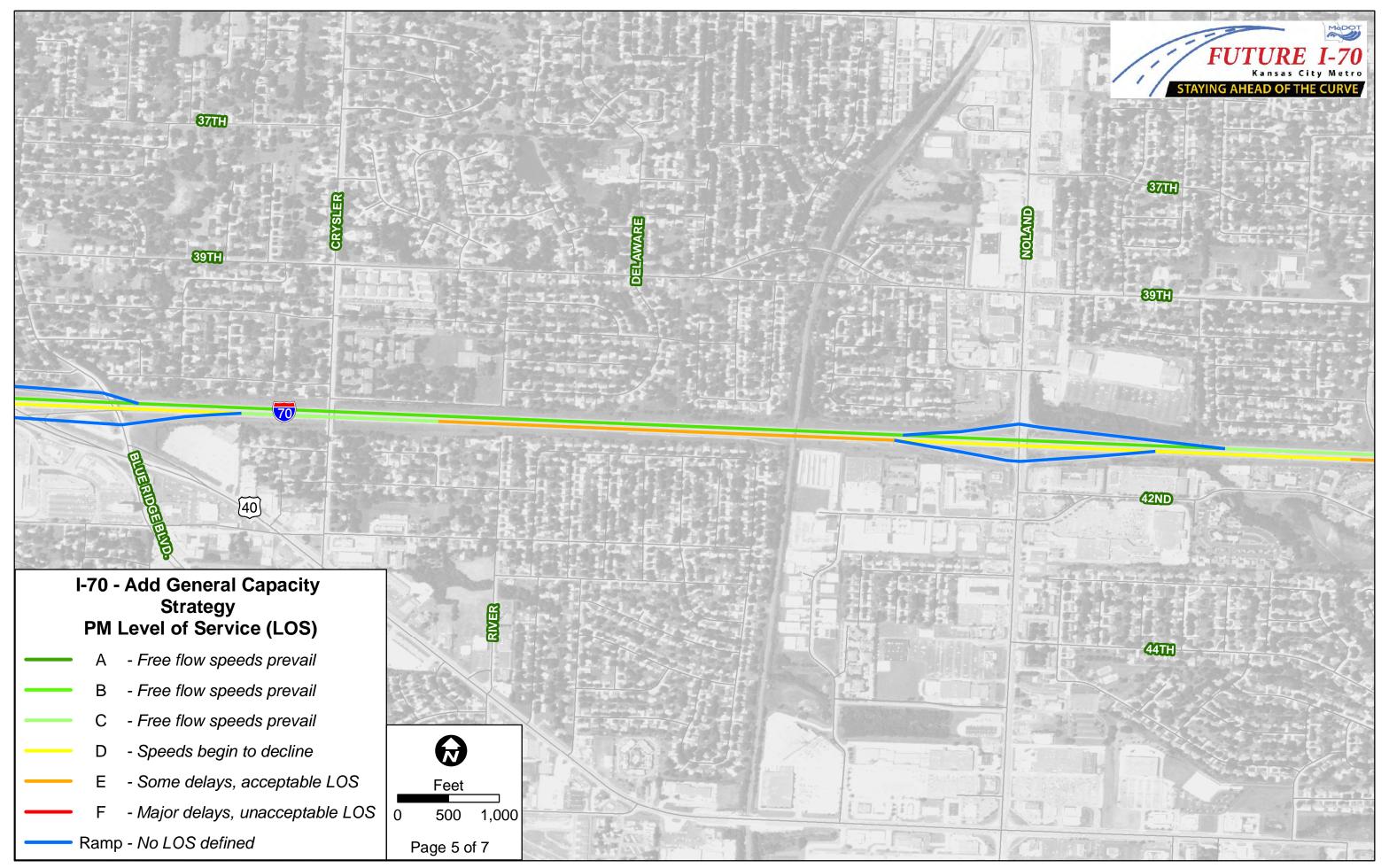




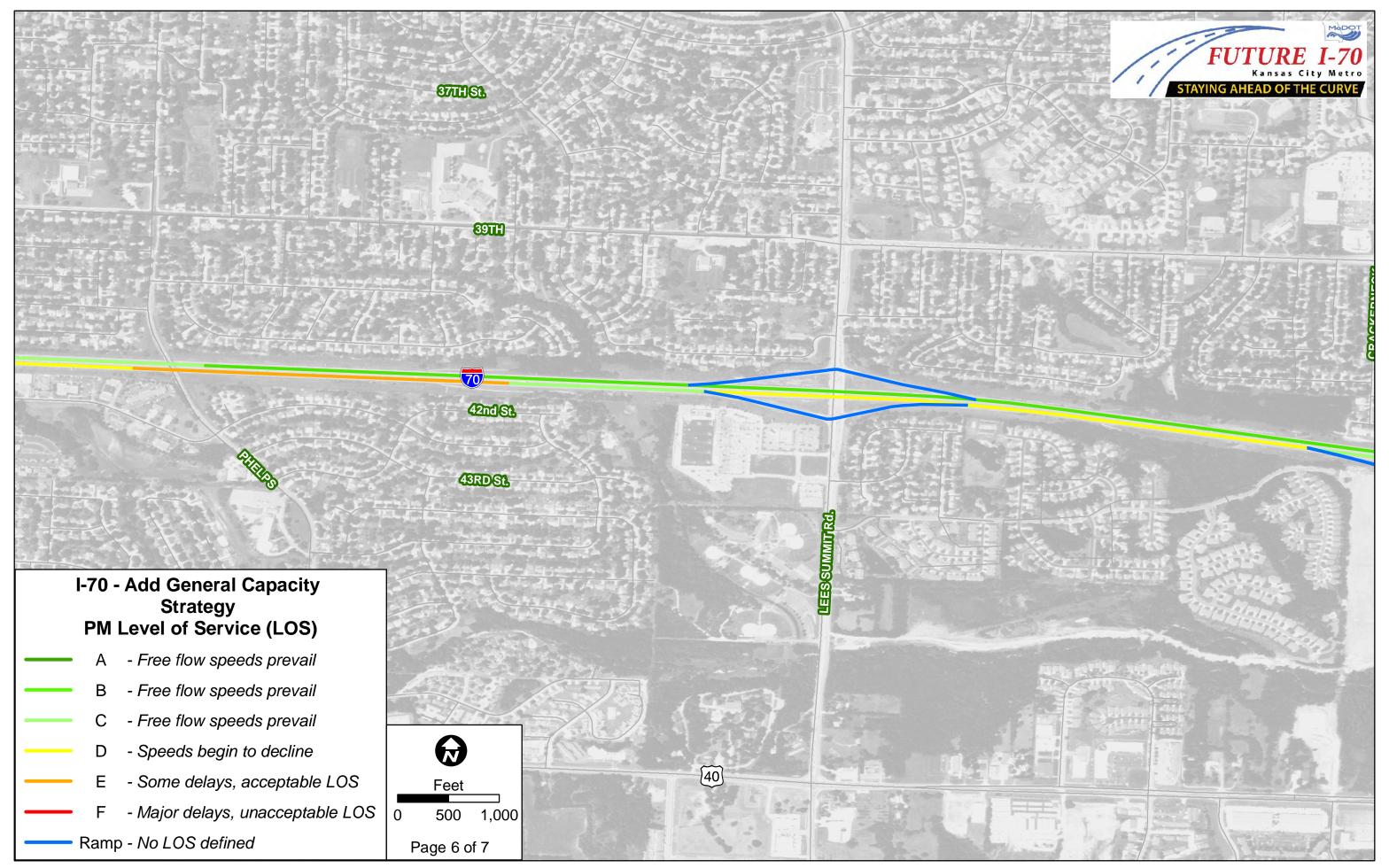


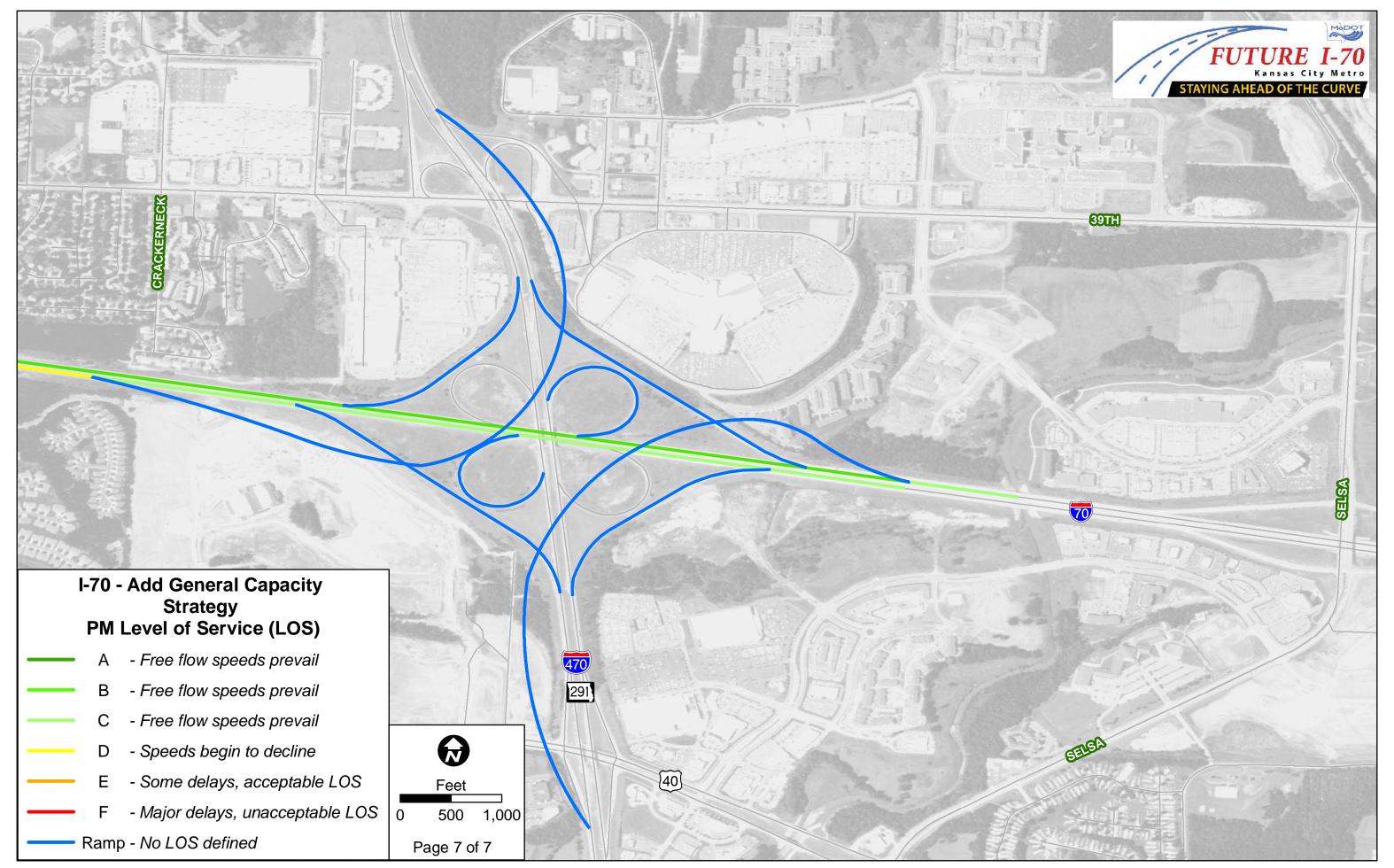


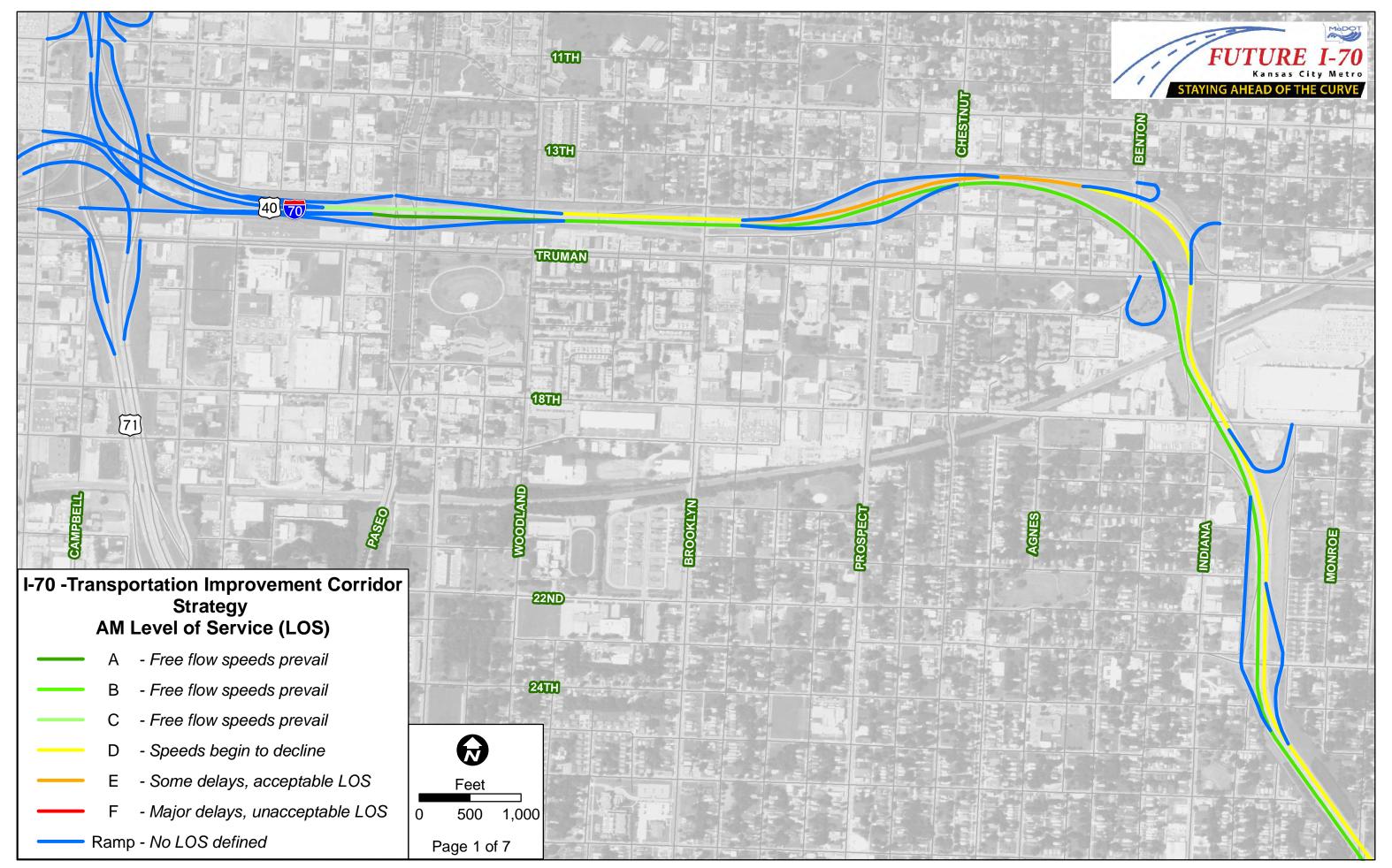




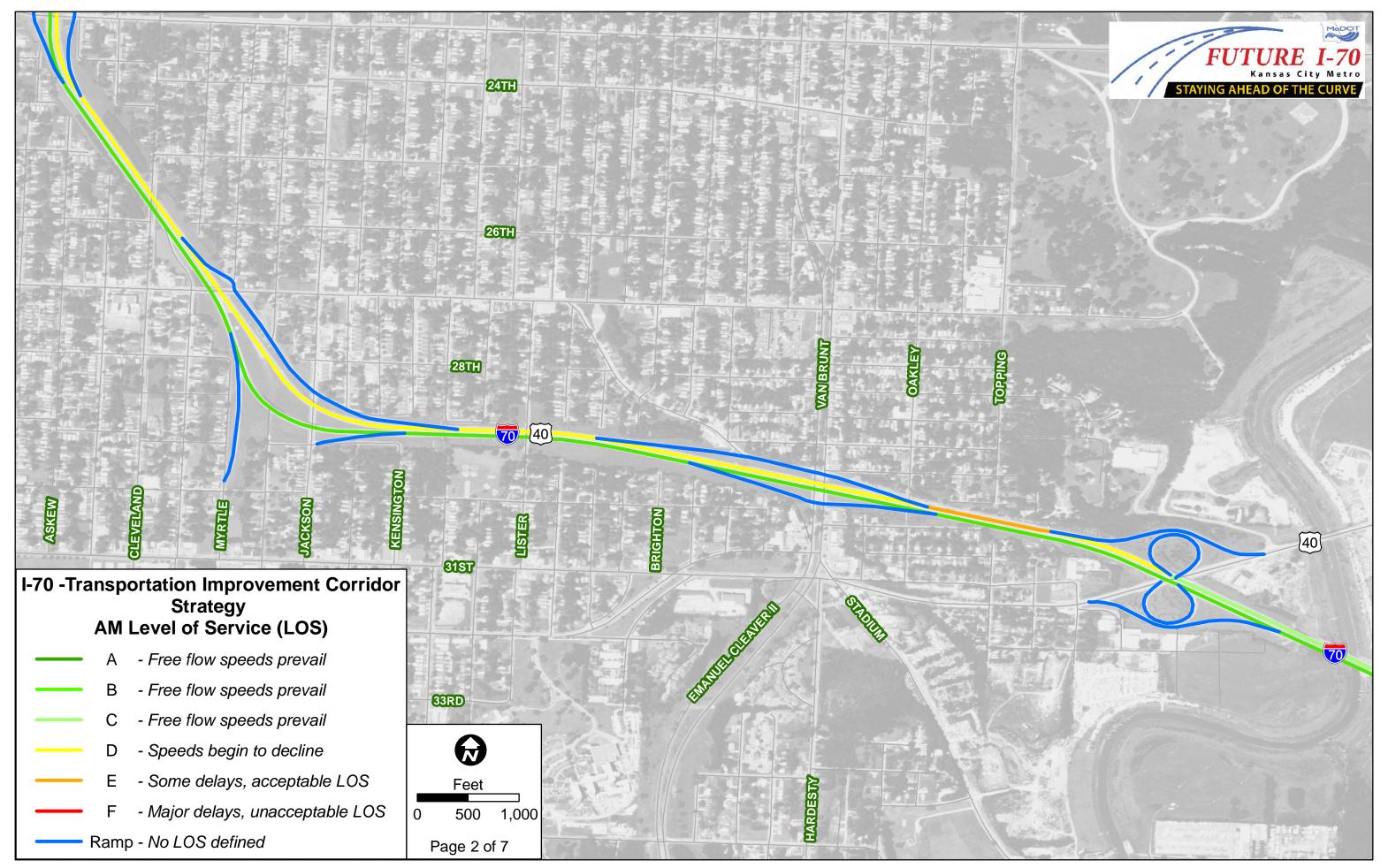
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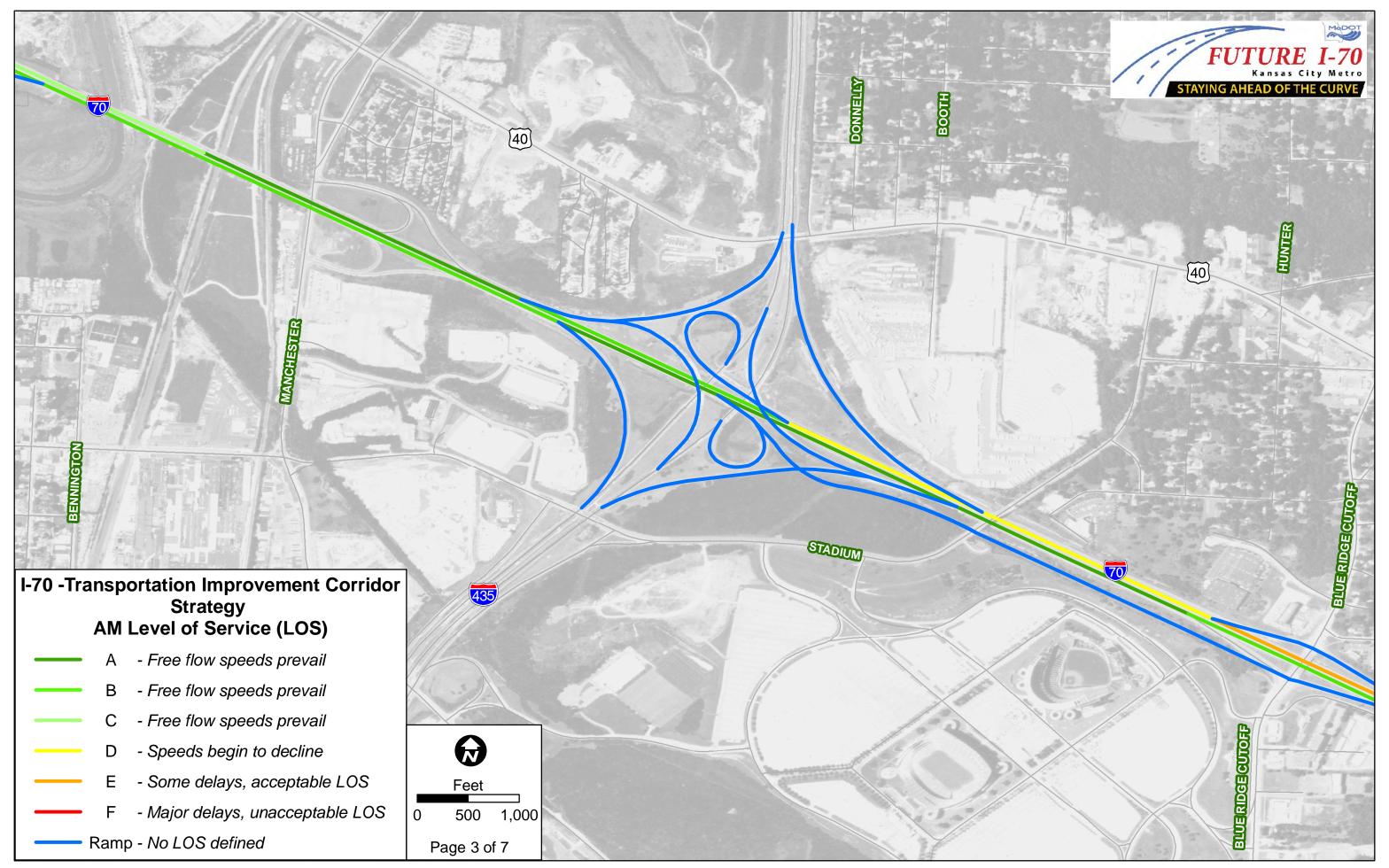


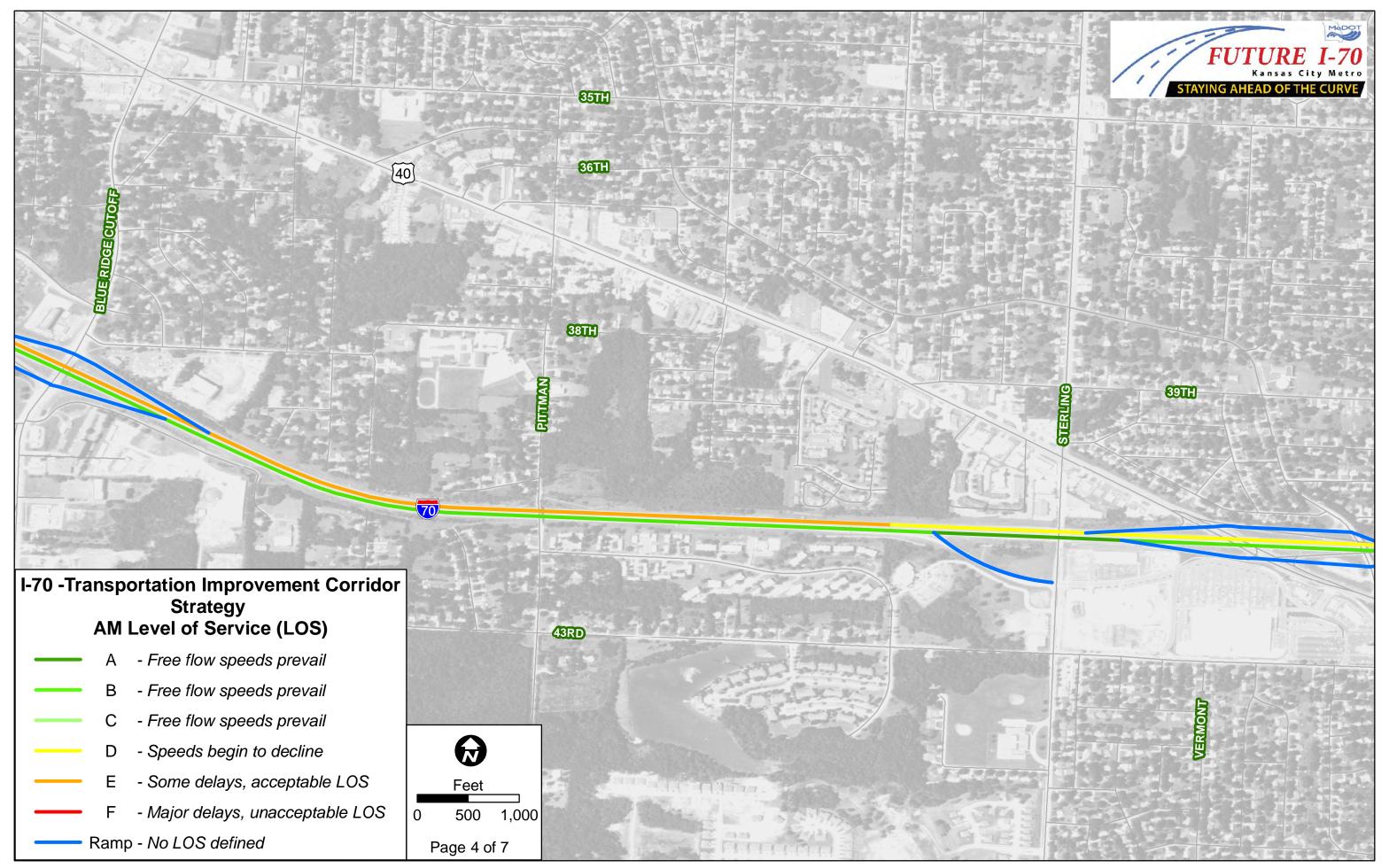


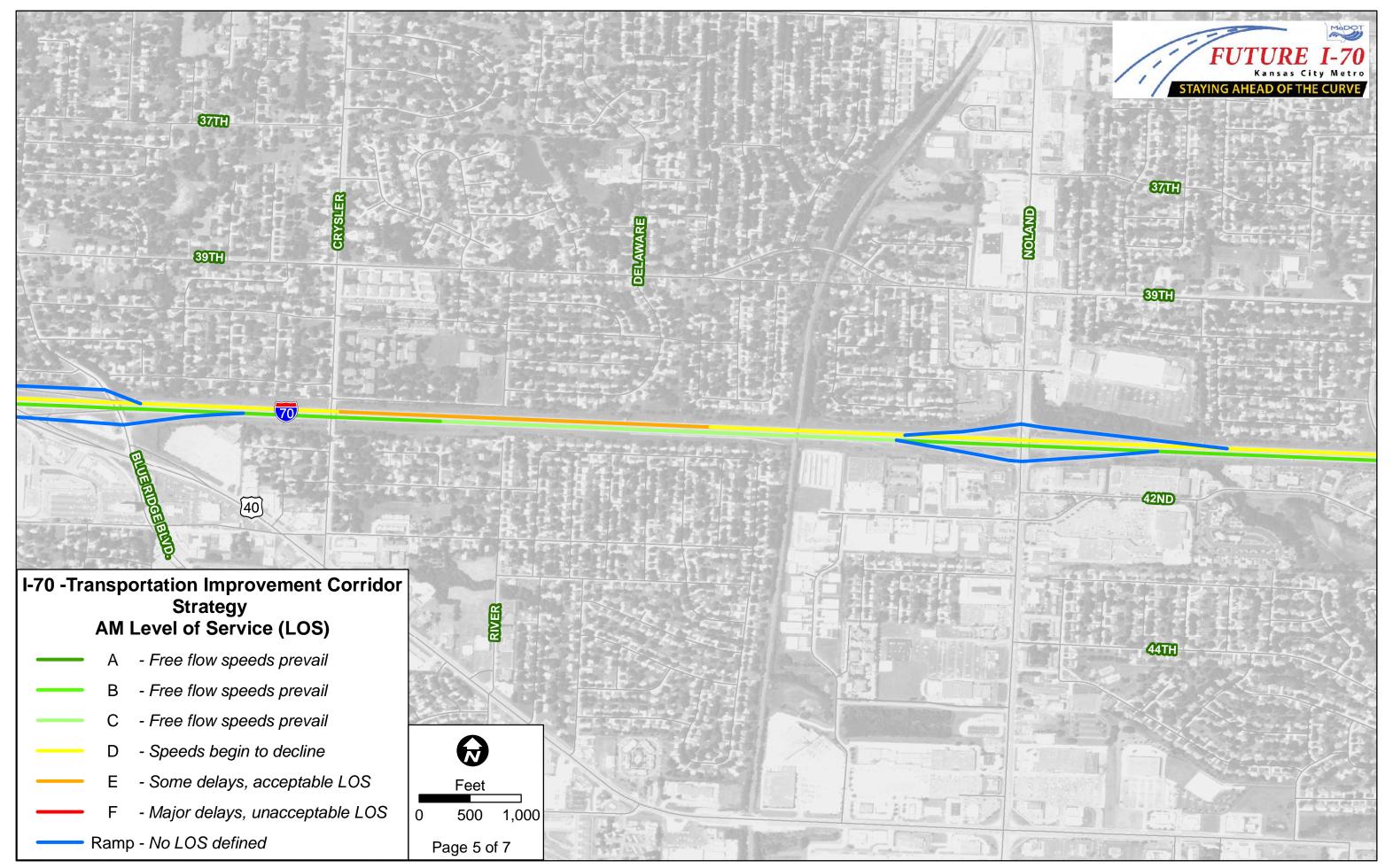


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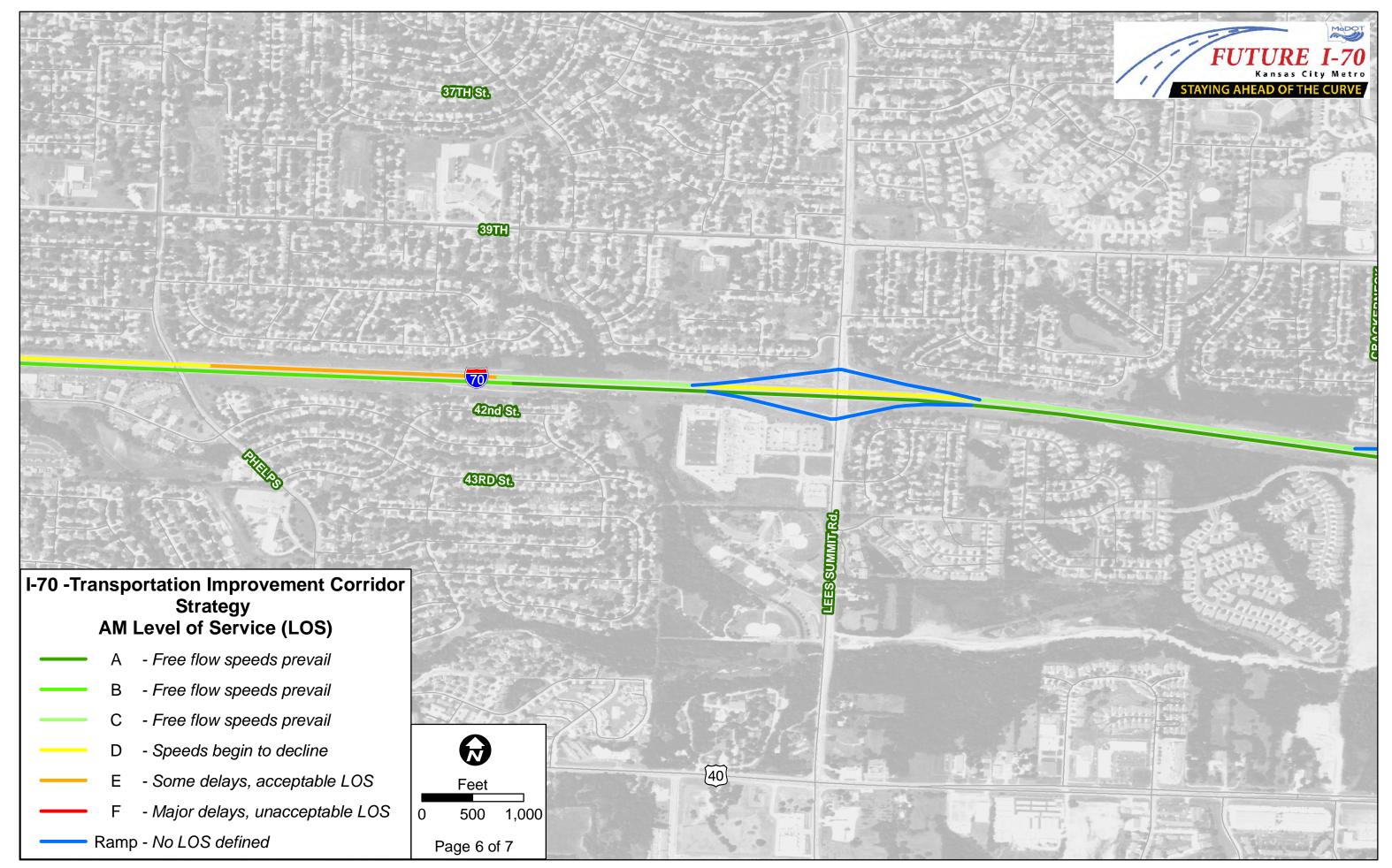


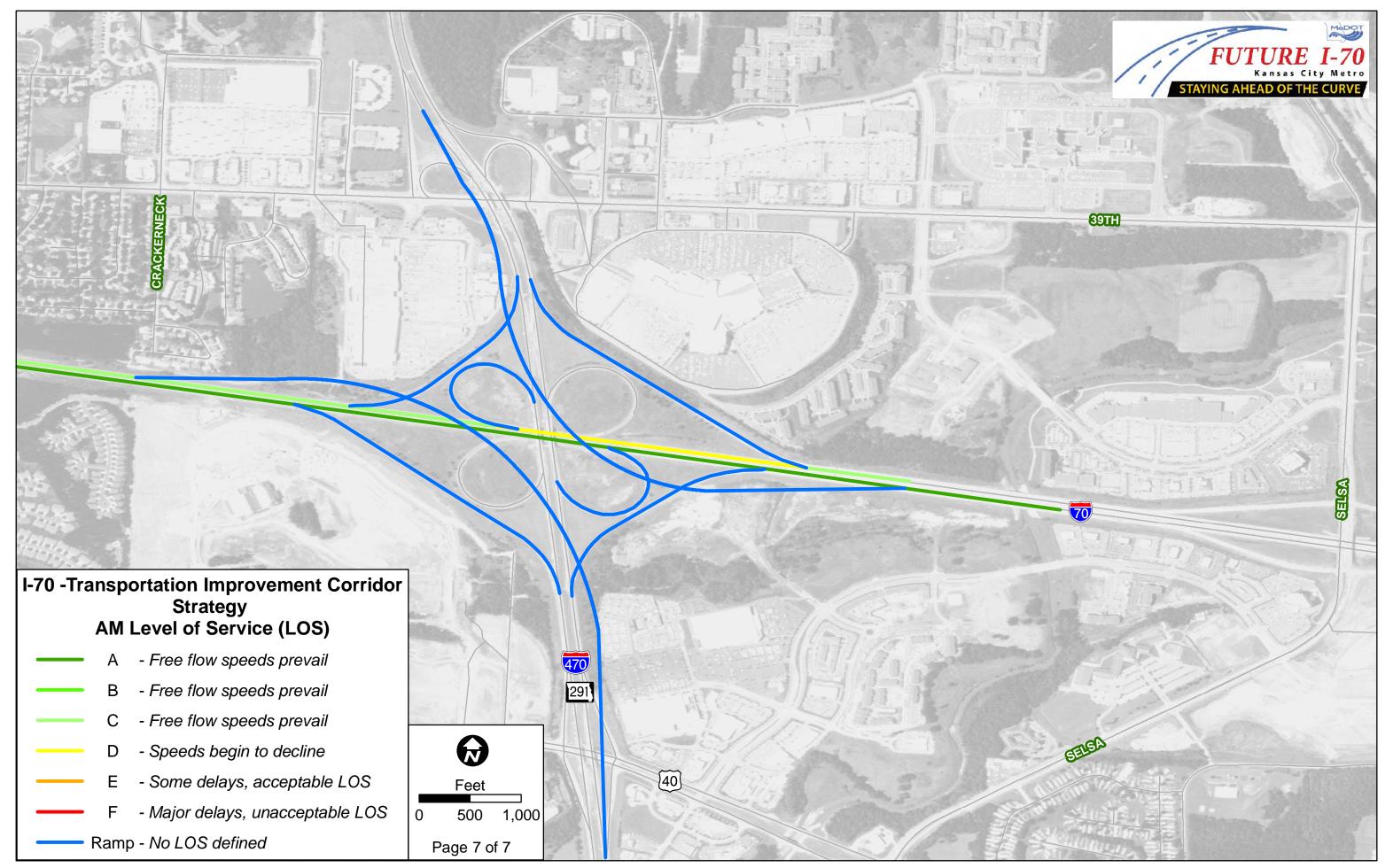


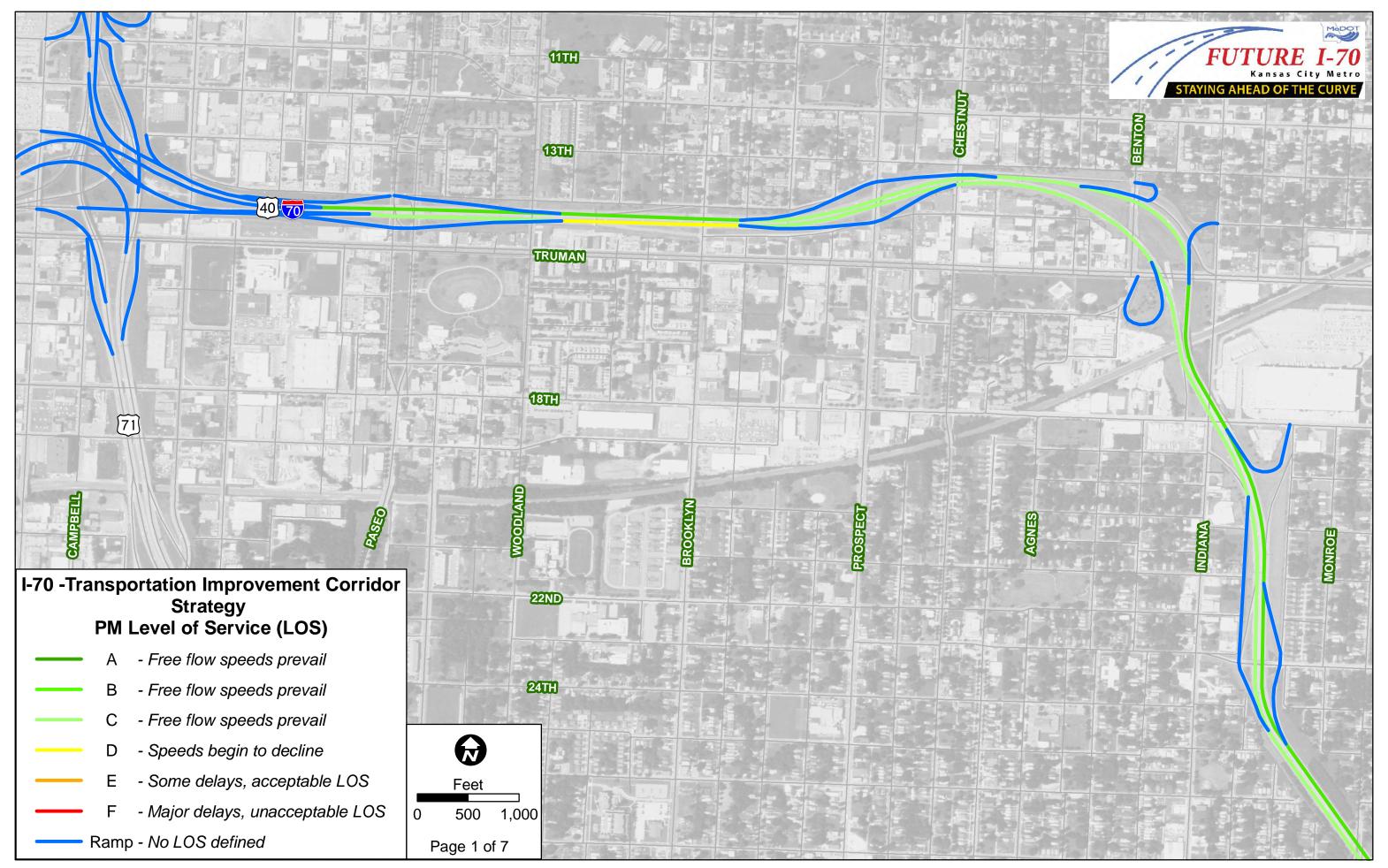


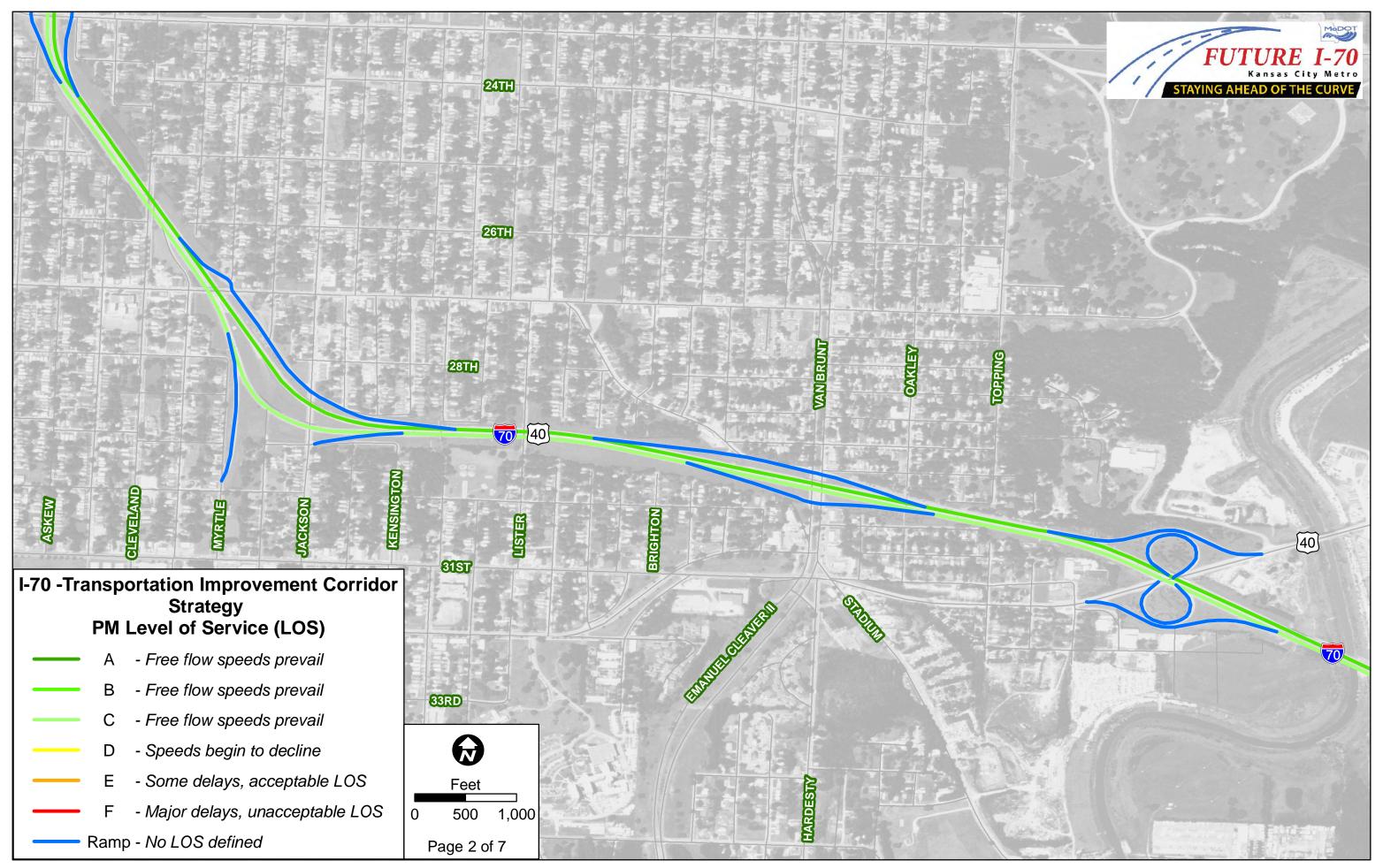


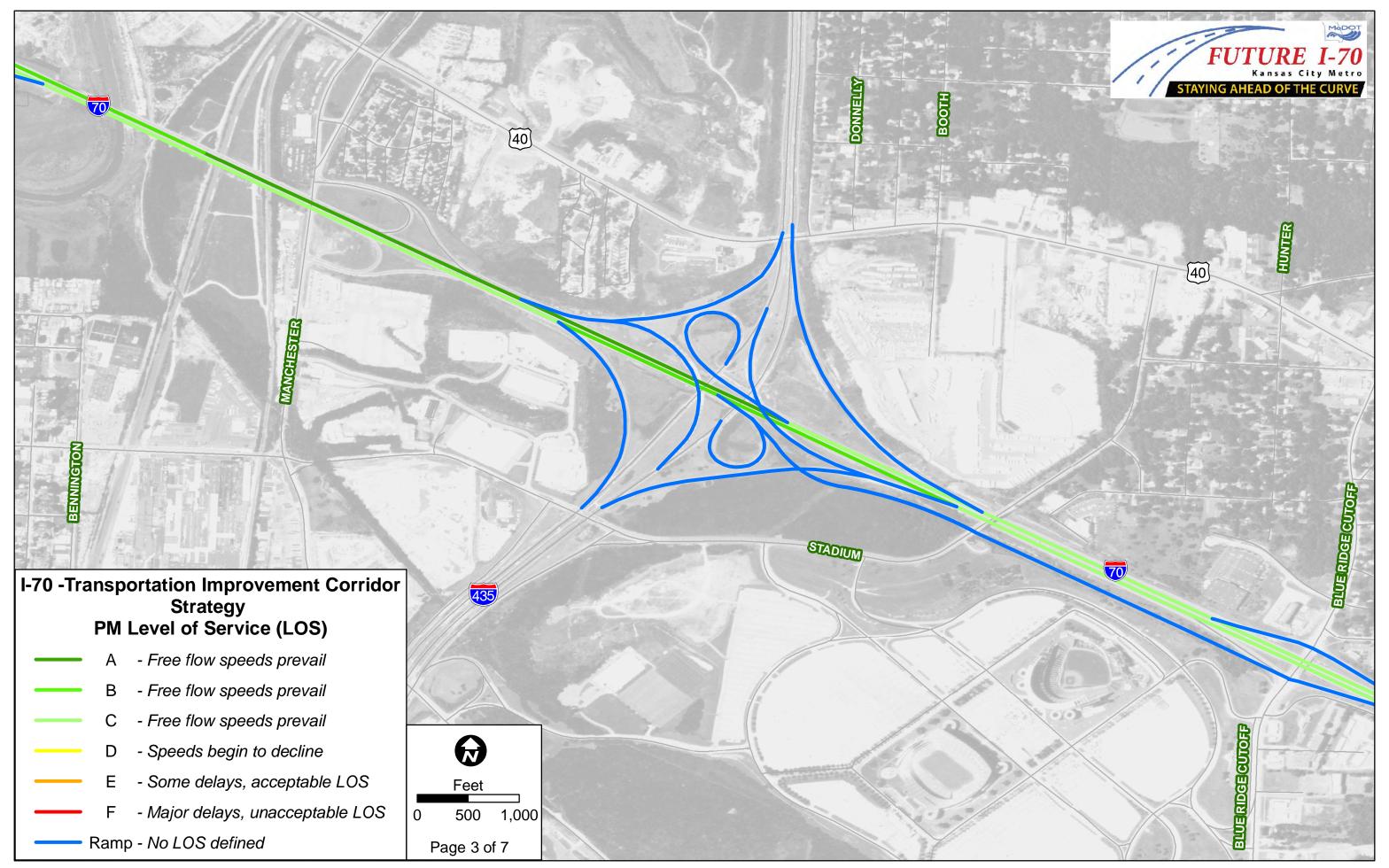
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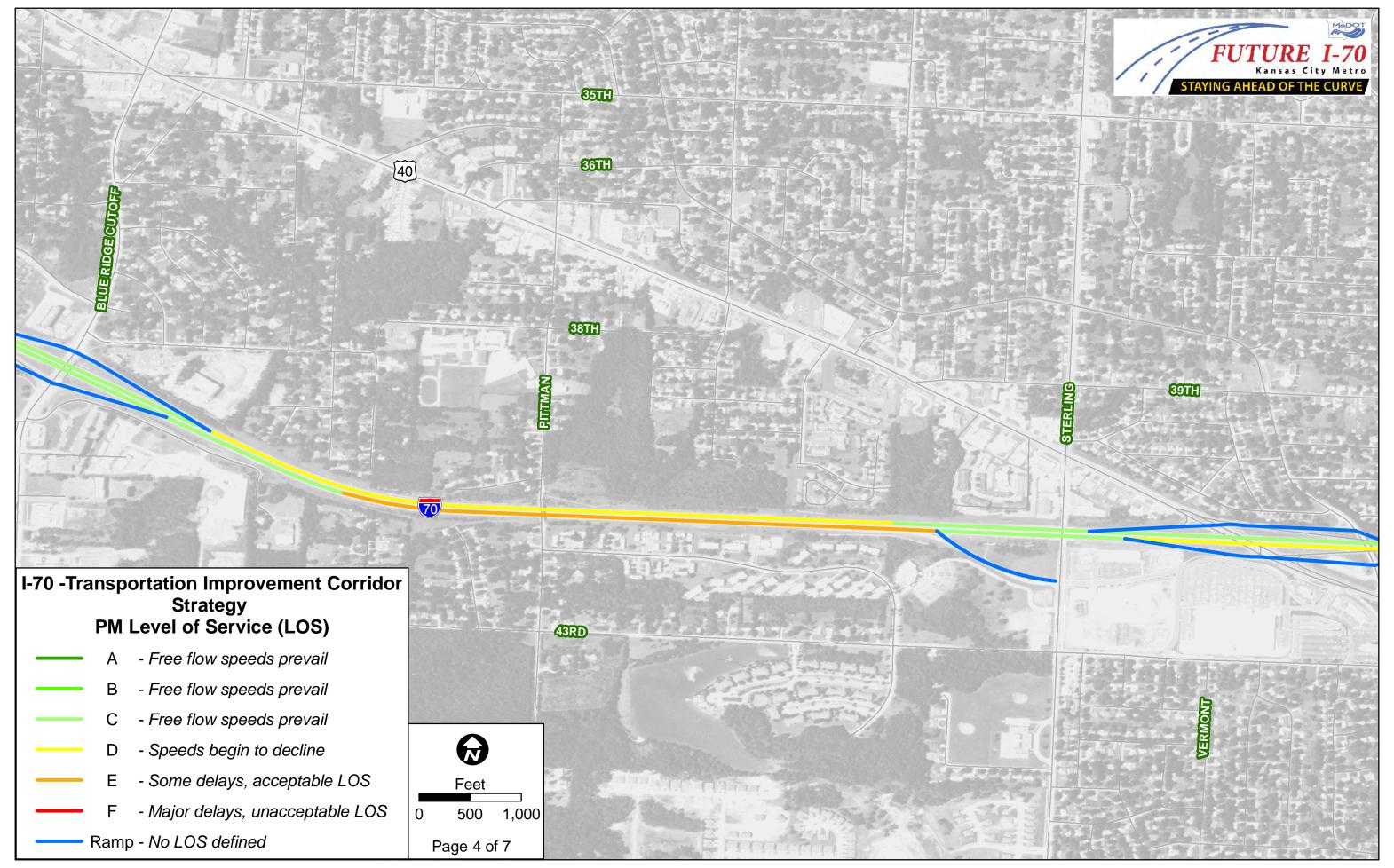


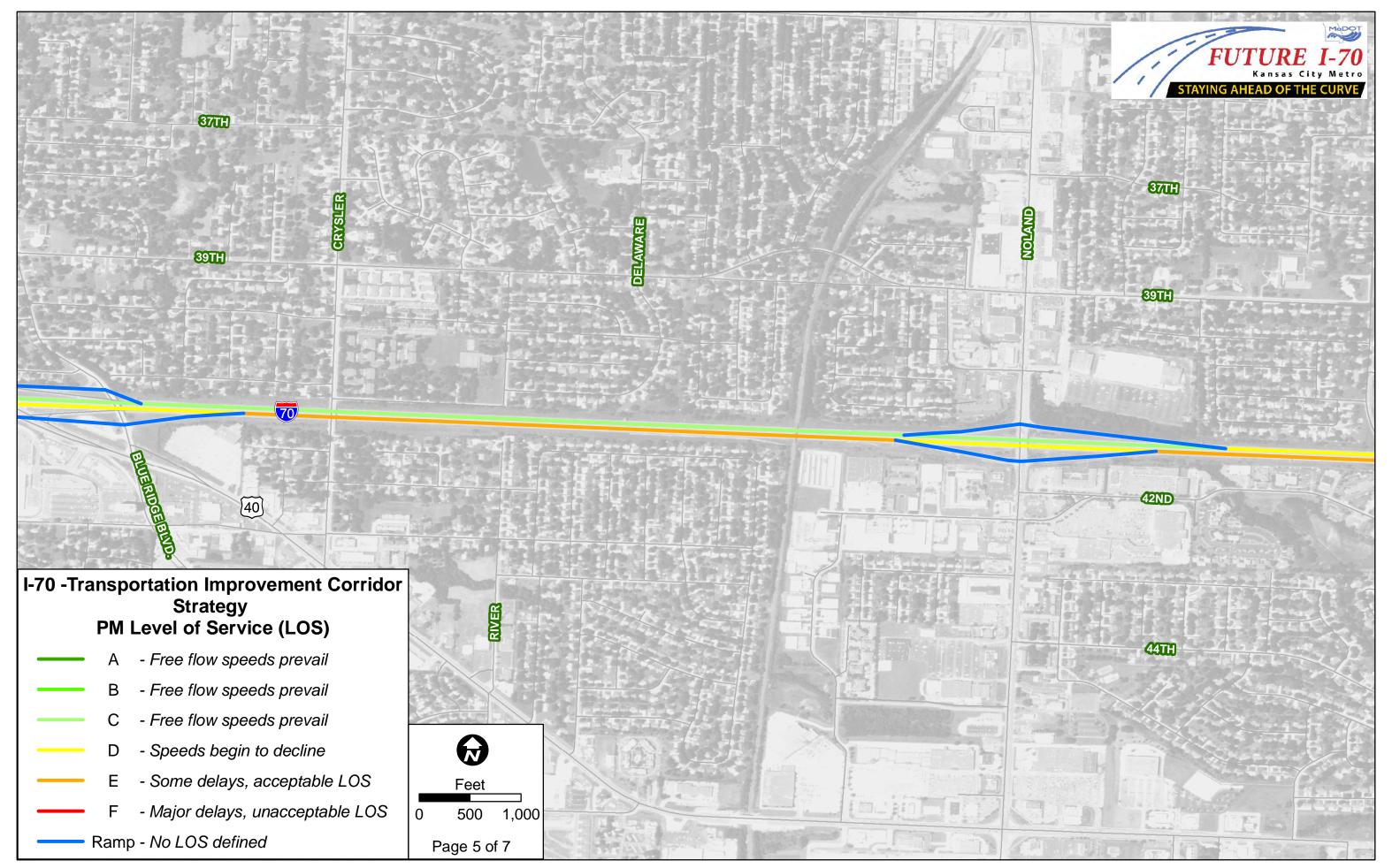


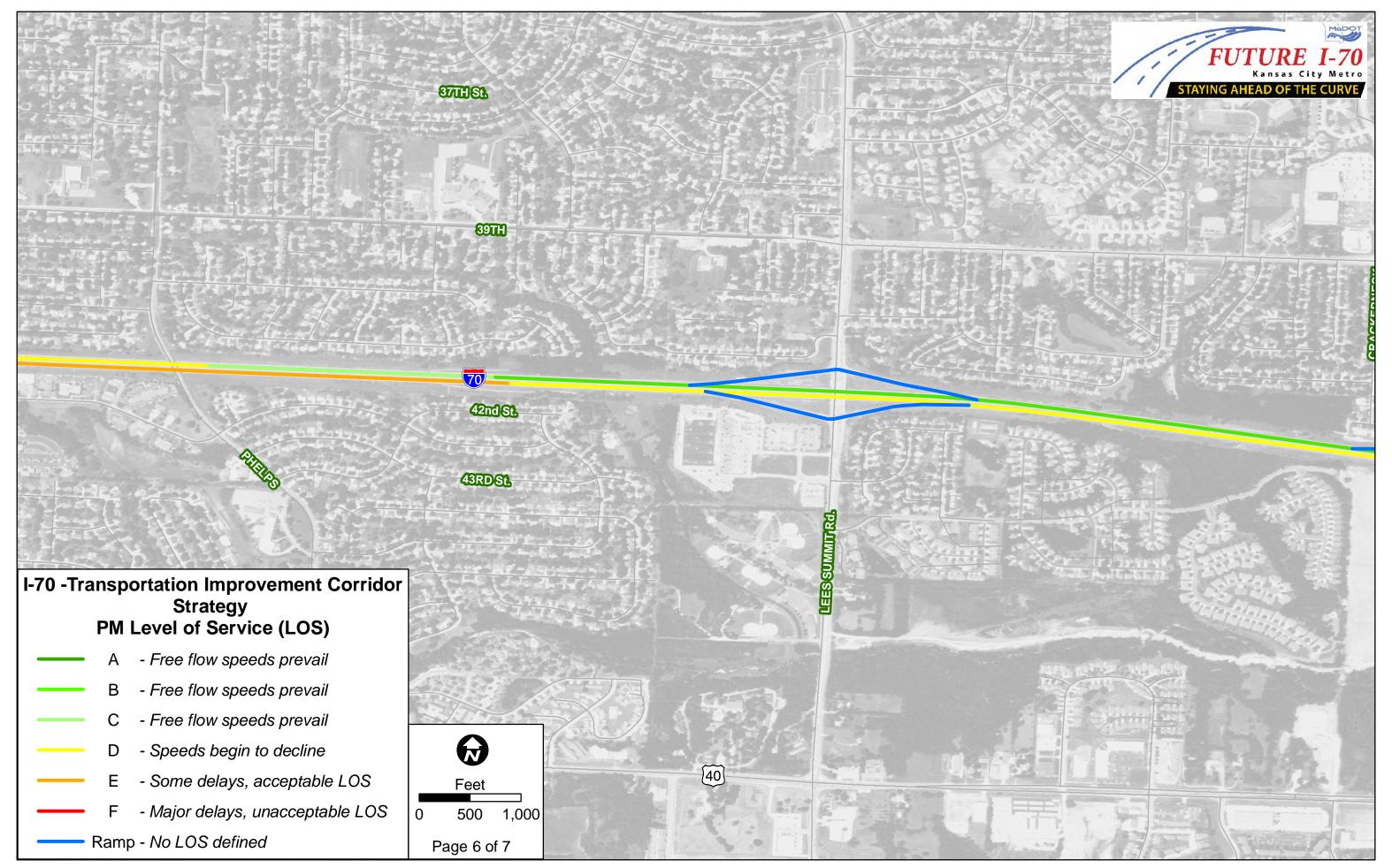






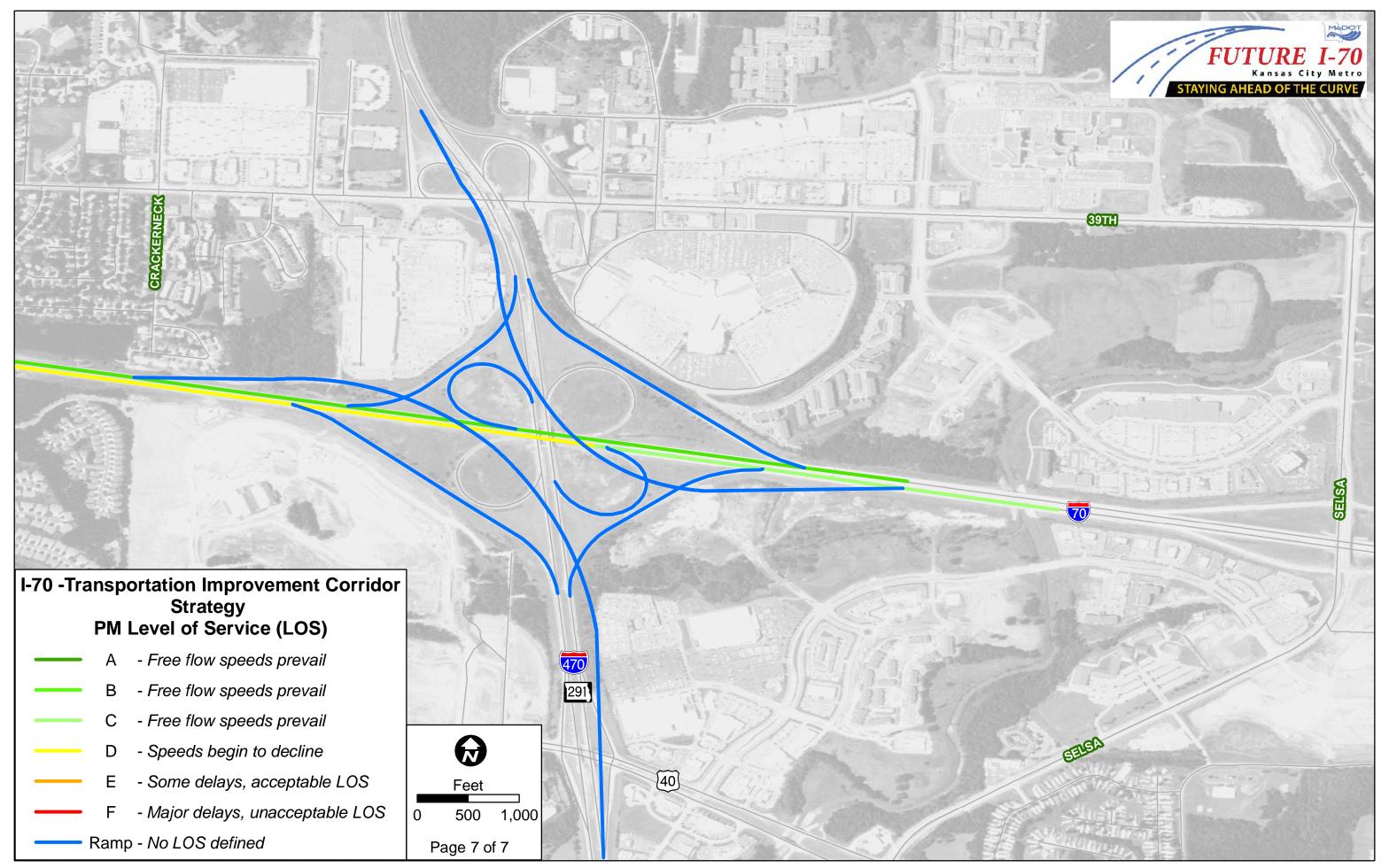






Level of Service Analysis

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Level of Service Analysis

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Public and Agency Coordination Documents

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DEPARTMENT OF TRANSPORTATION

[4910-22]

Federal Highway Administration

FIRST TIER ENVIRONMENTAL IMPACT STATEMENT: Jackson County, Missouri

AGENCY: Federal Highway Administration (FHWA), DOT

ACTION: Notice of Intent

SUMMARY: The FHWA is issuing this notice to advise the public that a First Tier Environmental Impact Statement (EIS) will be prepared for proposed improvements to I-70 from the end of the last ramp termini east of the Missouri and Kansas state line to east of the I-470 interchange, including the entire Kansas City, Missouri's Downtown Central Business District (CBD) Freeway Loop, in Jackson County, Missouri.

FOR FURTHER INFORMATION CONTACT: Ms. Peggy Casey, Environmental Projects Engineer, FHWA Division Office, 3220 West Edgewood, Suite H, Jefferson City, MO 65109, Telephone Number 573-636-7104; or Mr. Kevin Keith, Chief Engineer, Missouri Department of Transportation, P.O. Box 270, Jefferson City, MO 65102, Telephone Number 573-751-2803.

SUPPLEMENTARY INFORMATION: The FHWA, in cooperation with the Missouri Department of Transportation (MoDOT), will prepare a First Tier EIS to consider impacts of improvements to I-70 from the end of the last ramp termini east of the Missouri and Kansas state line to east of the I-470 interchange, including the entire Kansas City, Missouri's Downtown CBD Freeway Loop, Jackson County Missouri. The project length is approximately 18 miles.

MoDOT in partnership with the Mid-America Regional Council (MARC) and the Kansas City Area Transportation Authority (KCATA) completed a Major Investment Study (MIS) for the I-70 corridor in Jackson County in November 2004. The MIS evaluated the I-70 corridor in a general nature and recommended an improvement strategy that the reconstructing and widening of the existing facility from the Kansas City, Missouri's Downtown Central Business (CBD) Freeway Loop to the Route F/H interchange in Oak Grove, Missouri. This strategy also included the redesigning access and interchanges for the entire CBD Freeway Loop.

FHWA and MoDOT are now preparing a First Tier EIS to develop an improvement strategy for the highway elements of the I-70 corridor, using the MIS Statement of Purpose and Need and Strategy Packages as their foundation. The First Tier EIS will also coordinate with completed and ongoing studies. These studies are the I-70 Transit Alternatives Analysis, Kansas City, Missouri's Downtown CBD Study, I-29/I-35 Paseo Bridge Corridor EIS, I-470 Purpose and Need study and the I-70 Supplemental EIS study.

Strategies to be considered include (1) no build; (2) highway widening and interchange improvements strategies; and (3) multi-modal options. The First Tier EIS will seek to determine

sections of independent utility over this 18-mile stretch of I-70 that will become the basis for second tier environmental studies.

As part of the scoping process, an interagency coordination meeting will be held with federal and state resource agencies, and local agencies. In addition, informational meetings with the public and community representatives will be held to solicit input on the project. The Study Management Team from the I-70 MIS will be re-established which will consist of agency staff from MoDOT, MARC and KCAT, and other local participating agencies identified. A location public hearing will be held to present the findings of the Draft First Tier EIS. Public notice will be given announcing the time and place of all public meetings and the hearing. The Draft First Tier EIS will be available for public and agency review and comment prior to the public hearing.

To ensure that the full range of issues related to this proposed action are addressed and all significant issues are identified, comments and suggestions are invited from all interested parties. Comments and questions concerning this proposed action and the First Tier EIS should be directed to the FHWA or MoDOT at the addresses provided above. Concerns in the study area include impacts to communities, cultural resources and rivers.

(Catalog of Federal Domestic Assistance Program Number 20.205, Highway Planning and Construction. The regulations implementing Executive Order 12372 regarding intergovernmental consultation on Federal programs and activities apply to this program.)

Issued on: June, 2008.	:		
		<u> </u>	
Peggy Casey, P.E.			
Environmental Projects Engineer			
Jefferson City, Missouri			· :

Proposed Action, which are considered in the draft EIS. Under Alternative 1, the FAA would consider issuing a launch site operator license only for the operation of a launch site to support horizontal launches. This is considered a feasible alternative because a significant number of launches of horizontal LVs are projected, and most X Prize Cup activities would be located at the airfield.

Under Alternative 2, the FAA would consider issuing a launch site operator license only for the operation of a launch site to support vertical launches. This is considered a feasible alternative because a significant number of launches are projected to be of vertical LVs.

Under the No Action Alternative, the FAA would not issue a launch site operator license to the NMSA. Subsequently, the need to support commercial launches and host the X Prize Cup would not be met by the State of New Mexico.

Resource areas were considered to provide a context for understanding and assessing the potential environmental effects of the Proposed Action, with attention focused on key issues. The resource areas considered included compatible land use; Section 4(f) lands and farmlands; noise; visual resources and light emissions; historical, architectural, archaeological, and cultural resources; air quality; water quality, wetlands, wild and scenic rivers, coastal resources, and floodplains; fish, wildlife, and plants; hazardous materials, pollution prevention, and solid waste; socioeconomics, environmental justice, and children's environmental health and safety risks; and energy supply and natural resources. Construction impacts and secondary (induced) impacts are also considered. Additional analyses considered in the appendices include geology and soils; mineral resonrces; air space; health and safety; and transportation.

FOR FURTHER INFORMATION CONTACT: Stacey M. Zee (AST-100), Office of Commercial Space Transportation, 800 Independence Avenne, SW., Room 331, Washington, DC 20591, telephone (202) 267-9305; E-mail stacey.zee@faa.gov.

Issued in Washington, DC on July 2, 2008. Michael McElligott,

Manager, Space Systems Development Division.

[FR Doc. E8-15545 Filed 7-8-08; 8:45 am] BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration [Summary Notice No. PE-2008-25]

Petitions for Exemption; Summary of Petitions Received

AGENCY: Federal Aviation Administration (FAA), DOT. ACTION: Notice of petitious for exemption received.

SUMMARY: This notice contains a summary of certain petitions seeking relief from specified requirements of 14 CFR. The purpose of this notice is to improve the public's awareness of, aud participation in, this aspect of FAA's regulatory activities. Neither publication of this notice nor the inclusion or omission of information in the summary is intended to affect the legal status of any petition or its final disposition.

DATES: Comments on petitions received must identify the petition docket number involved and must be received on or before July 21, 2008.

ADDRESSES: You may send comments identified by Docket Number FAA—2006—25466 using any of the following methods:

• Government-wide Rulemaking Web Site: Go to http://www.regulations.gov and follow the instructions for sending your comments electronically.

• Mail: Send comments to the Docket Management Facility; U.S. Department of Transportation, 1200 New Jersey Avenue, SE., West Building Ground Floor, Room W12–140, Washington, DC 20590.

• Fax: Fax comments to the Docket Management Facility at 202–493–2251.

• Hand Delivery: Bring comments to the Docket Management Facility in Room W12–140 of the West Building Ground Floor at 1200 New Jersey Avenue, SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

• Docket: To read background documents or comments received, go to http://www.regulations.gov at any time or to the Docket Management Facility in Room W12–140 of the West Building Ground Floor at 1200 New Jersey Avenue, SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

SUPPLEMENTARY INFORMATION: We will post all comments we receive, without change, to http://www.regulations.gov, including any personal information you provide. Using the search function of our docket Web Site, anyone can find and read the comments received into any of our dockets, including the name

of the individual sending the comment (or signing the comment for an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the Federal Register published on April 11, 2000 (65 FR 19477–78).

FOR FURTHER INFORMATION CONTACT: Tyneka Thomas (202) 267–7626 or Frances Shaver (202) 267–9681, Office of Rulemaking, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591.

This notice is published pursuant to 14 CFR 11.85.

Issued in Washington, DC, on July 2, 2008. Pamela Hamilton-Powell, Director, Office of Rulemaking.

Petitions for Exemption

Docket No.: FAA-2006-25466.
Petitioner: Southwest Airlines Co.
Section of 14 CFR Affected:
§§ 121.391(a) and 121.393(b).

Description of Relief Sought: To clarify or amend Southwest Airlines, Co. (Southwest), current Exemption No. 9382, which allows Southwest to substitute a pilot for one required flight attendant crewmember during boarding at an intermediate stop and to reduce the number of required flight attendants onboard during the deplaning of passengers at an intermediate stop. The clarification or amendment Southwest seeks would broaden the exemption to include all stops from the time the aircraft door is opened upon arrival at the gate until the door is closed prior to the next flight operation. Southwest also requests that the certificate holder may substitute for the required flight attendants other persons qualified in the emergency evacuation procedures for that aircraft as required in § 121.417, for all stops, if these persons are identified to the passengers.

[FR Doc. E8-15481 Filed 7-8-08; 8:45 am]
BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Highway Administration

First Tier Environmental Impact Statement: Jackson County, MO

AGENCY: Federal Highway Administration (FHWA), DOT. ACTION: Notice of intent.

SUMMARY: The FHWA is issuing this notice to advise the public that a First Tier Environmental Impact Statement (EIS) will be prepared for proposed improvements to I-70 from the end of the last ramp termini east of the Missouri and Kansas state line to east of

the I–470 interchange, including the entire Kansas City Downtown Central Business District (CBD) Freeway Loop, in Jackson County, Missouri.

FOR FURTHER INFORMATION CONTACT: Ms. Peggy J. Casey, Environmental Projects Engineer, FHWA Division Office, 3220 West Edgewood, Suite H, Jefferson City, MO 65109, Telephone: (573) 636–7104; or Mr. Kevin Keith, Chief Engineer, Missouri Department of Transportation, P.O. Box 270, Jefferson City, MO 65102, Telephone: (573) 751–2803.

SUPPLEMENTARY INFORMATION: The FHWA, in cooperation with the Missouri Department of Transportation (MoDOT), will prepare a First Tier EIS to consider the impacts of improvements to I–70 from the end of the last ramp termini east of the Missouri and Kansas state line to east of the I–470 interchange, including the entire Kansas City downtown CBD freeway loop, in Jackson County, Missouri. The project length is approximately 18 miles (20 miles with freeway loop segments).

MoDOT, in partnership with Mid-America Regional Council (MARC), and the Kansas Čity Area Transportation Authority (KCATA), completed a Major Investment Study (MIS) for the I-70 corridor in Jackson County in November, 2004. The MIS evaluated the I–70 corridor in a general nature and recommended an improvement strategy that would reconstruct and widen the existing facility from Kansas City's downtown CBD freeway loop to the Route F/H interchange in Oak Grove, Missouri. This strategy also included redesigning access and interchanges for the entire CBD freeway loop.

FHWA and MoDOT are now preparing a First Tier EIS to develop an improvement strategy for the highway elements of the I–70 corridor, using the MIS Statement of Purpose and Need and Strategy Packages as the foundation. The First Tier EIS will coordinate with completed and ongoing studies. These studies include the I–70 Transit Alternatives Analysis; the Kansas City, Missouri's Downtown CBD Study; the I–29/I–35 Paseo Bridge Corridor EIS; the I–470 Purpose and Need study; and the I–70 Supplemental EIS study.

Strategies to be considered include (1) no build; (2) highway widening and interchange improvement strategies; and (3) transportation system management options. The First Tier EIS will seek to determine sections of independent utility over this 18-mile stretch of I-70 that will become the basis for second tier environmental studies (20 miles with the freeway loop segments).

The First Tier EIS will conform to the environmental review process as established in Section 6002 of the Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA-LU). The Section 6002 environmental review process requires the following activities: Identification and invitation of cooperating and participating agencies; establishment of a coordination plan; and opportunities for additional agency and public comment on the project's purpose and need, strategies, and methodologies for determining impacts.

As part of the scoping process, an interagency coordination meeting will be held with federal and state resource agencies and local agencies. In addition, informational meetings with the public and community representatives will be held to solicit input on the project. The Study Management Team from the I-70 MIS will be re-established and will consist of agency staff from MoDOT, MARC, KCAT, and other identified local participating agencies. A location public hearing will be held to present the findings of the Draft First Tier EIS. Public notice will be given announcing the time and place of all public meetings and the hearing. The Draft First Tier EIS will be available for public and agency review and comment prior to the public hearing.

To ensure that the full range of issues related to this proposed action is addressed and all significant issues are identified, comments and suggestions are invited from all interested parties. Comments and questions concerning this proposed action and the First Tier EIS should be directed to the FHWA or MoDOT at the addresses provided above. Concerns in the study area include potential impacts to communities, cultural resources, and rivers.

(Catalog of Federal Domestic Assistance Program Number 20.205, Highway Planning and Construction. The regulations implementing Executive Order 12372 regarding intergovernmental consultation on Federal programs and activities apply to this program.)

Issued on: June 27, 2008.

Peggy J. Casey,

Environmental Project Engineer, Jefferson City.

[FR Doc, E8-15611 Filed 7-8-08; 8:45 am] BILLING CODE 4910-22-P

DEPARTMENT OF TRANSPORTATION

Federal Motor Carrier Safety Administration

Sunshine Act Meetings; Unified Carrier Registration Plan Board of Directors

AGENCY: Federal Motor Carrier Safety Administration (FMCSA), DOT. TIME AND DATE: August 7, 2008, 12 noon to 3 p.m., Eastern Daylight Time. PLACE: This meeting will take place telephonically. Any interested person may call Mr. Avelino Gutierrez at (505) 827—4565 to receive the toll free number and pass code needed to participate in these meetings by telephone.

STATUS: Open to the public.

MATTERS TO BE CONSIDERED: The Unified Carrier Registration Plan Board of Directors (the Board) will continue its work in developing and implementing the Unified Carrier Registration Plan and Agreement and to that end, may consider matters properly before the Board.

FOR FURTHER INFORMATION CONTACT: Mr. Avelino Gutierrez, Chair, Unified Carrier Registration Board of Directors at (505) 827–4565.

Dated: July 2, 2008.

William A. Quade,

Associate Administrator for Enforcement and Program Delivery.

[FR Doc. 08–1426 Filed 7–7–08; 2:54 pm]
BILLING CODE 4910–EX-P

DEPARTMENT OF THE TREASURY

Alcohol and Tobacco Tax and Trade Bureau

Proposed Information Collections; Comment Request

AGENCY: Alcohol and Tobacco Tax and Trade Bureau, Treasnry.

ACTION: Notice and request for comments.

summary: As part of our continuing effort to reduce paperwork and respondent burden, and as required by the Paperwork Reduction Act of 1995, we invite comments on the proposed or continuing information collections listed below in this notice.

DATES: We must receive your written comments on or before September 8, 2008.

ADDRESSES: You may send comments to Mary A. Wood, Alcohol and Tobacco Tax and Trade Bureau, at any of these addresses:

• P.O. Box 14412, Washington, DC 20044-4412;

Appendix E.2 Resource Management Group Meeting Notes	



Meeting Documentation



Group Name: I-70 First Tier Environmental Impact Statement, Jackson

County - Job No. J4I1486B **No.** 1

Resource Agency Group Meeting and Tour

Date: July 16, 2008 **Time:** 1:00 p.m.

Team Leader: Allan Zafft **Phone Number:** 816-622-0687

Location: MoDOT District 4 Office (Lee's Summit)

In Attendance: Representing (Agency or Firm)

David Park City of Kansas City, MO - Neighborhood and Community

Services Department (N.C.S.D.)

John Stapleton Stapleton Law Firm John Powell City of Independence

Todd Gemeinhardt Missouri Department of Conservation

Robert Bens Environmental Advisors and Engineers (EAE)
Alan Mitchell Environmental Advisors and Engineers (EAE)
Mark Griffith Environmental Advisors and Engineers (EAE)

Dan O'Connor Kansas City Area Transportation Authority (KCATA)

Mell Henderson Mid-America Regional Council (MARC)
Jane Beetem Missouri Department of Natural Resources

Douglas Berka U. S. Army Corps of Engineers, Kansas City District

Chuck Miller HNTB

Matt Burcham MoDOT - CO Design Lee Ann Kell MoDOT - District 4 Allan Zafft MoDOT - District 4

Chris Nazar Wilbur Smith Associates (WSA) Randy Rowson Wilbur Smith Associates (WSA)

Summary of Discussion

A PowerPoint presentation was given by Allan Zafft and Chris Nazar. This presentation will serve as part of the minutes.

- 1. Allan Zafft welcomed the attendees and introductions were made.
- 2. Allan Zafft gave an overview of the I-70 FTEIS Project.

I-70 FTEIS Meeting Notes

- 3. Project Study Area
 - a. Chris Nazar reviewed the project study area.
 - b. There is a 1,000 foot buffer for socio-economics and other more indirect impacts.
 - c. There is a 100 foot mainline butter for potential direct impacts which widens to a 300 foot buffer at key interchanges.
- 4. Reviewed what a "First Tier" Document is. First Tier Documents inform/educate.
- 5. Reviewed previously completed studies.
- 6. I-70 FTEIS Purpose and Need
 - a. Highlight Purpose and Need safety, congestion, engineering and design issues, mode choice, and goods movements.
- 7. Key Resource Issues
 - a. Discussed human factors.
 - b. Discussed environmental factors.
 - c. Discussed other factors: cultural, archaeological, T&E, Section 4(f), Section 6(f), and Section 106.
- 8. Agency Coordination
 - a. Copies of the Public Involvement and Agency Coordination Plans document were distributed for review and comments.
 - b. Agency Coordination designed to address agency concerns early.
 - c. Comments on this document from participating agencies are due August 15th.
- 9. Approach and Timing Reviewed project schedule.
- 10. Coordination Plan
 - a. David Park will help with neighborhood association contacts.
 - b. Request assistance from Kansas City and MARC for identification of special language requirement neighborhoods.
 - c. Mell Henderson stated the need to be ready to discuss with the public:
 - i. How to reduce fuel consumption
 - ii. Greenhouse gas emissions
- 11. Methodologies Memorandum
 - a. Copies of the Methodologies Memorandum were distributed for review and comments.
 - b. Comments on this document from participating agencies are due August 15th.
- 12. Chris Nazar gave a summary of the presentation.
- 13. Conclusion/Comments/Questions
 - a. Hole in downtown why? Outside 300 foot buffer for detailed socioeconomic/land use inventory.
 - b. Missing 300 foot buffer on U.S. 69 (Broadway)

I-70 FTEIS Meeting Notes

14. Study Area Tour - after the meeting adjourned, attendees were invited to go along on a driving tour of the study area. (Comments made on the tour are attached.)

Authored by: Randy Rowson

I-70 First Tier Environmental Impact Statement, Jackson County Job No. J4I1486B Resource Agency Group Study Area Tour July 16, 2008

Comments:

- Study Team needs to track the Mayor's Regional Transit Plan mid-August will know what will be on the November ballot (starter line vs. regional plan).
- Bus on shoulders a consideration in FTEIS.
- Stadium Drive Bridge frames downtown view.
- I-435 interchange study ½ diamond on U.S. 40 with I-435 (north side) hope to relieve interchange congestion.
- Study Team needs to coordinate with Lid Study KCMO HNTB.
- MoDOT owns property under I-70 west bottoms. Easement required for use under bridge.
- Admiral ramp to eastbound I-70 was proposed to be taken out in 29/35 EIS study. Need to keep in due to tight/short weave between 11th and 12th Street and I-70 eastbound ramp.
- U.S. 69 at Broadway backup on to west side of loop. One lane northbound at northwest corner of loop need to weave two lanes to continue north on I-35.
- Columbus Park Neighborhood Vietnamese speaking pocket.
- McGee Street Bridge to be taken out (most likely).



Meeting Documentation



Group Name: I-70 First Tier Environmental Impact Statement

Kansas City Metro - Job No. J4I1486B No. 2

Resource Agency Group Meeting

Date: November 3, 2008 **Time:** 10:00 a.m.

Team Leader: Allan Zafft **Phone Number:** 816-622-0687

Location: MoDOT District 4 Office (Lee's Summit)

<u>In Attendance:</u> <u>Representing (Agency or Firm)</u>

Peggy Casey Federal Highway Administration (FHWA) Roopa Banerjee Federal Highway Administration (FHWA)

Dan O'Connor Kansas City Area Transportation Authority (KCATA)

Ron Acholpohl Mid-America Regional Council (MARC)
Jane Beetem Missouri Department of Natural Resources

Douglas Berka U. S. Army Corps of Engineers, Kansas City District

Tom Degenhardt Kansas City MO PW

Charles Pursley MoDOT - Design Environmental Toni Prawl MoDOT - Design Environmental

Kelly Cox MoDOT

Matt Burcham MoDOT - CO Design
Lee Ann Kell MoDOT - District 4
Allan Zafft MoDOT - District 4

Chris Nazar Wilbur Smith Associates (WSA) Randy Rowson Wilbur Smith Associates (WSA)

Summary of Discussion

- 1. Allan Zafft welcomed the attendees and introductions were made.
- Chris Nazar reviewed the project's goals and expected results First Tier goals, Section of Independent Utility, and Preferred Strategy and provided a recap of recent project activity.
 - a. Public Meetings Changing to a proactive public input approach to increase turn out and involvement. The Study Team will use web based content as an outreach tool. Shifting to strategy of going out to the public.

- b. The environmental field studies have been completed. The Study Team is starting to write the Affected Environment section of the DEIS.
- 3. The Draft Purpose and Need Technical Memorandum is out for review. Comments are due by November 10th.
- 4. Initial Concepts and Strategy Packages
 - a. Chris Nazar reviewed the No-Build Concept; Bottleneck Concepts; General Capacity Improvement Concepts; and Specialty Capacity Improvement Concepts presented at the Public Meetings.
 - b. 15 initial strategy packages were developed Strategy Packages 1-7 were from the MIS with minor revisions. Strategy Packages 8-15 were developed by the Study Team based on the purpose and need goals, public and stakeholder input.
 - c. Reviewed the initial strategy package screening process Purpose and Need goals, environmental issues, and engineering issues.
 - d. Will narrow down to four packages. Likely they will be: No-Build; Bottleneck, General Capacity, and Specialty Lanes.
 - e. Comment Clearly indicate the origin of the packages (i.e. MIS preferred) and be consistent throughout.
 - f. Environmental Issues Blue River floodplain, community environmental justice, noise, cultural (NCRP) properties.
 - g. Elevated section not easily mitigated for noise.
 - h. Cultural issues are more historic 4(f) not as much park 4(f) properties.
- 5. Public Involvement Upcoming Activities Low turn out at the Public Meetings led to change Public Involvement approach. Will have an Open House Listening Post, Speakers Bureaus at home owner association and other group meetings, create an interactive PDF slideshow with a blog for comments, and have interactive MoDOT mobile meetings at various locations (football games, Farmer's Market, shopping area).
- 6. Chris Nazar reviewed the next steps and the schedule.
- 7. Questions/Comments
 - a. MARC will finalize draft of LRTP next fall. MoDOT/MARC need to work together on showing further project costs as part of LRTP development as financial constraints may be more stringent.
 - b. Coordination with I-70 Statewide TOL Study and identify where/how transition impacts the KC Metro. The transition area will be a concern. Need a plan to move I-70 Statewide results into 2nd Tier EIS, if needed.
 - c. Engineering issues discussed tunnel, elevated lanes, rail, and curves. Bus transit on shoulder is included in this study.
 - d. Inform KCMO and MARC of when outreach events will take place.

- e. MARC has OneKC Voice to setup Speaker Bureau as an option. LRTP is drawing interest for speakers.
- f. Mobile Meetings can tag on to other regional project public involvement events if I-70 discussion is appropriate. Coordinate with LRTP events.
- g. PI Speaker Bureau letter will be mailed this week.

Authored by: Randy Rowson

Appendix E.3 Correspondence with 1	Federal, State, and Local Agencies

Missouri Department of Transportation



105 West Capitol Avenue P.O. Box 270 Jefferson City, MO 65102 (573) 751-2551 Fax (573) 751-6555 www.modot.org

Pete K. Rahn, Director



2007 Missouri Quality Award Winner

June 26, 2008

John Askew Regional Administrator US EPA Region 7 901 N. 5th Street Kansas City, KS 66101

Dear Mr. Askew:

Subject:

I-70 First Tier Environmental Impact Statement

I-70 Jackson County, MO MoDOT Job No. J4I1486B

Request to become a Cooperating and Participating Agency

The Federal Highway Administration (FHWA), in cooperation with the Missouri Department of Transportation (MoDOT), will prepare a First Tier Environmental Impact Statement (FTEIS) to consider impacts of improvements to I-70 from the end of the last ramp termini east of the Missouri and Kansas state line to east of the I-470 interchange, including the entire Kansas City, Missouri's Downtown Central Business District (CBD) Freeway Loop in Jackson County Missouri. The project length is approximately 18 miles (20 miles including all segments of the downtown loop). We have enclosed a copy of a Project Location Map for your review.

<u>Project Background:</u> MoDOT in partnership with the Mid-America Regional Council (MARC) and the Kansas City Area Transportation Authority (KCATA) completed a Major Investment Study (MIS) for the I-70 corridor in Jackson County in November 2004. The MIS evaluated the I-70 corridor in a general nature and recommended an improvement strategy that the reconstructing and widening of the existing facility from the Kansas City, Missouri's Downtown CBD Freeway Loop to the Route F/H interchange in Oak Grove, Missouri. This strategy also included the redesigning access and interchanges for the entire CBD Freeway Loop.

Mr. Askew June 26, 2008 Page 2

FHWA and MoDOT are now preparing a FTEIS to develop an improvement strategy for the highway elements of the I-70 corridor, using the MIS Statement of Purpose and Need and Strategy Packages as their foundation. The FTEIS will also coordinate with completed and ongoing studies. These studies are the I-70 Transit Alternatives Analysis, Kansas City, Missouri's Downtown CBD Study, I-29/I-35 Paseo Bridge Corridor EIS, I-470 Purpose and Need study and the I-70 Supplemental EIS study.

Strategies to be considered include (1) no build; (2) highway widening and interchange improvements strategies; and (3) Transportation System Management (TSM). The First Tier EIS will seek to determine sections of independent utility over this 18-mile stretch of I-70 that will become the basis for second tier environmental studies.

<u>Cooperating and Participating Agency Invitation:</u> The purpose of this letter is to initiate coordination with your agency. With this letter, FHWA and MoDOT request your agency to become a cooperating agency, in accordance with 40 CFR 1501.6 of the Council on Environmental Quality's (CEQ) Regulations for Implementing the Procedural Provision of the National Environmental Policy Act, because the project may involve impacts to resources under your jurisdiction. We also invite your agency under Section 6002 of SAFETEA-LU to become a participating agency with the FHWA in the development of the I-70 FTEIS. Neither designation implies that your agency supports the proposal.

Your agency has been identified as one that may have an interest in the I-70 FTEIS, because of the following:

- Your jurisdiction over environmental resources including the Clean Air Act and Clean Water Act.
- Your expertise with environmental resources including soil, air, and water quality and protection of human health.

Accordingly, your agency is being extended this invitation to become a cooperating and participating agency for the project.

Role as a Cooperating and Participating Agency: As a cooperating and participating agency for the I-70 FTEIS, you will be afforded the opportunity, together with the public, to be involved in defining the purpose of and need for the project, as well as in determining the range of alternatives to be considered. Your agency's involvement as a cooperating agency should include those areas under its jurisdiction and expertise, with no direct writing or analysis expected for preparation of the FTEIS. We will take the following actions to maximize interagency cooperation:

- Invite you to coordination meetings;
- Consult with you on any relevant technical studies the project requires;
- Provide you with project information, including study results;
- Encourage you to express your agency's views on subjects within its jurisdiction or expertise; and
- Include information in the project environmental documents that your agency needs to discharge its National Environmental Policy Act (NEPA) responsibilities.

The Environmental Protection Agency has the right to expect that the FTEIS will enable you to discharge your jurisdictional responsibilities for this phase of the project. If at any point in the process your agency's needs are not being met, we need to be informed so steps can be taken to resolve the issue.

As a participating agency you will be asked to:

- Provide input on the impact assessment methodologies for your agency's area of expertise;
- Participate in coordination meetings, conference calls, and joint field reviews, as appropriate; and
- Review and comment on sections of the pre-draft and pre-final environmental documents to communicate any concerns of your agency on the adequacy of the document, the alternatives considered, and the anticipated impacts and mitigation.

A detailed coordination plan will be provided at the first agency coordination meeting, as discussed below.

<u>Project Agency Meeting and Tour:</u> Your agencies designated representative(s) are invited to attend the first agency coordination meeting and Study Area tour. The meeting will be held on Wednesday July 16, 2008 at 1:00 PM at the MoDOT District 4 Office, 600 NE Colbern Road, Lee's Summit, MO 64086. The coordination meeting is expected to last 1.5 hours and will be followed by a 1.5 hour tour of the Study Area. At the meeting, the Study Team will provide an overview of the study process and key issues. There will also be time for agencies to provide input on key concerns regarding the projects potential environmental or socioeconomic impacts. Following the meeting, the meeting materials and notes will be sent to agency representatives who are unable to attend.

<u>Response Requested:</u> We request that your agency provide confirmation on whether you are accepting or declining the invitation to become a cooperating and/or participating agency. The acceptance or declination of this invitation may be transmitted electronically to Allan Zafft at Allan.Zafft@modot.mo.gov; please include the title of the official responding or via mail to the MoDOT District 4 office shown above. Responses should be transmitted to this office no later

Mr. Askew June 26, 2008 Page 4

than July 15, 2008. If your agency declines to become a cooperating agency but wishes to be a participating agency, please state your reasons for doing so.

As a Federal agency, if you elect not to become a participating agency, you must decline this invitation in writing. Your letter declining the invitation must indicate that your agency has no jurisdiction or authority with respect to the project, no expertise or information relevant to the project, and does not intend to submit comments on the project.

Your assistance is greatly appreciated and we look forward to working with you as the study progresses. If you have questions regarding this invitation, please contact Allan Zafft at 816-622-0687.

Sincerely,

David B. Nichols, P.E. Director of Program Delivery

Enclosures

Copy: Mr. Allen Masuda-FHWA

Mr. Matt Burcham-de Mr. Allan Zafft-4tp

Missouri Department of Transportation



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Pete K. Rahn, Director



2007 Missouri Quality Award Winner

June 26, 2008

Wayne Cauthen
City Manager
City of Kansas City - City Manager's Office
414 East 12th Street
City Hall
Kansas City, MO 64106

Dear Mr. Cauthen:

Subject:

I-70 First Tier Environmental Impact Statement

I-70 Jackson County, MO MoDOT Job No. J4I1486B

Request to become a Participating Agency

The Federal Highway Administration (FHWA), in cooperation with the Missouri Department of Transportation (MoDOT), will prepare a First Tier Environmental Impact Statement (FTEIS) to consider impacts of improvements to I-70 from the end of the last ramp termini east of the Missouri and Kansas state line to east of the I-470 interchange, including the entire Kansas City, Missouri's Downtown Central Business District (CBD) Freeway Loop in Jackson County Missouri. The project length is approximately 18 miles (20 miles including all segments of the downtown loop). We have enclosed a copy of a Project Location Map for your review.

<u>Project Background:</u> MoDOT in partnership with the Mid-America Regional Council (MARC) and the Kansas City Area Transportation Authority (KCATA) completed a Major Investment Study (MIS) for the I-70 corridor in Jackson County in November 2004. The MIS evaluated the I-70 corridor in a general nature and recommended an improvement strategy that the reconstructing and widening of the existing facility from the Kansas City, Missouri's Downtown CBD Freeway Loop to the Route F/H interchange in Oak Grove, Missouri. This strategy also included the redesigning access and interchanges for the entire CBD Freeway Loop.

Mr. Cauthen June 26, 2008 Page 2

FHWA and MoDOT are now preparing a FTEIS to develop an improvement strategy for the highway elements of the I-70 corridor, using the MIS Statement of Purpose and Need and Strategy Packages as their foundation. The FTEIS will also coordinate with completed and ongoing studies. These studies are the I-70 Transit Alternatives Analysis, Kansas City, Missouri's Downtown CBD Study, I-29/I-35 Paseo Bridge Corridor EIS, I-470 Purpose and Need study and the I-70 Supplemental EIS study.

Strategies to be considered include (1) no build; (2) highway widening and interchange improvements strategies; and (3) Transportation System Management (TSM). The First Tier EIS will seek to determine sections of independent utility over this 18-mile stretch of I-70 that will become the basis for second tier environmental studies.

<u>Participating Agency Invitation:</u> The purpose of this letter is to initiate coordination with your organization. Section 6002 of the current federal highway bill known as the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Section 6002 of SAFETEA-LU, which focuses on efficient environmental reviews for project decision-making, expands the involvement agencies and the public can have in the transportation decision making process. As part of the environmental review process, the lead agencies (FHWA and MoDOT) must identify any other Federal and non-Federal agencies that may have a specific interest in the project and invite these agencies to become participating agencies in the environmental review process.

Your agency has been identified as one that may have an interest in the I-70 FTEIS, because of the following:

- Your jurisdiction as a City over portions of the Study Area.
- Your expertise with local planning, economic development, community features, and resources.

Accordingly, your agency is being extended this invitation to become a participating agency for the project.

<u>Role as a Participating Agency:</u> As a participating agency for the I-70 FTEIS, you will be afforded the opportunity, together with the public, to be involved in defining the purpose of and need for the project, as well as in determining the range of alternatives to be considered. You will be asked to:

- Provide input on the impact assessment methodologies for your agency's area of expertise;
- Participate in coordination meetings, conference calls, and joint field reviews, as appropriate; and

Mr. Cauthen June 26, 2008 Page 3

> Review and comment on sections of the pre-draft and pre-final environmental documents to communicate any concerns of your agency on the adequacy of the document, the alternatives considered, and the anticipated impacts and mitigation.

A detailed coordination plan will be provided at the first agency coordination meeting, as discussed below.

<u>Project Agency Meeting and Tour:</u> Your agencies designated representative(s) are invited to attend the first agency coordination meeting and Study Area tour. The meeting will be held on Wednesday July 16, 2008 at 1:00 PM at the MoDOT District 4 Office, 600 NE Colbern Road, Lee's Summit, MO 64086. The coordination meeting is expected to last 1.5 hours and will be followed by a 1.5 hour tour of the Study Area. At the meeting, the Study Team will provide an overview of the study process and key issues. There will also be time for agencies to provide input on key concerns regarding the projects potential environmental or socioeconomic impacts. Following the meeting, the meeting materials and notes will be sent to agency representatives who are unable to attend.

<u>Response Requested:</u> We request that your agency provide confirmation on whether it is accepting or declining the invitation to become a participating agency. The acceptance or declination of this invitation may be transmitted electronically to Allan Zafft at Allan.Zafft@modot.mo.gov; please include the title of the official responding or via mail to the MoDOT District 4 office shown above. Responses should be transmitted to this office no later than July 15, 2008.

Your assistance is greatly appreciated and we look forward to working with you as the study progresses. If you have questions regarding this invitation, please contact Allan Zafft at 816-622-0687.

Sincerely,

David B. Nichols, P.E. Director of Program Delivery

Enclosures

Mr. Cauthen June 26, 2008 Page 4

Copy: Mr. Allen Masuda-FHWA

Mr. Matt Burcham-de

Mr. Allan Zafft-4tp

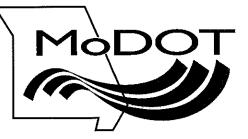
Mr. Thomas Coyle-City of Kansas City-City Planning and Development

Mr. Lester Washington-City of Kansas City-Neighborhood and Community Services

Mr. Mark McHenry-City of Kansas City-Parks and Recreation

Mr. Stan Harris-City of Kansas City-Public Works

Missouri Department of Transportation



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Pete K. Rahn, Director



2007 Missouri Quality Award Winner

June 26, 2008

Richard Hainje Regional Administrator, Region VII Federal Emergency Management Agency, Region VII 9221 Ward Parkway, Suite 300 Kansas City, MO 64114

Dear Mr. Hainje:

Subject:

I-70 First Tier Environmental Impact Statement

I-70 Jackson County, MO MoDOT Job No. J4I1486B

Request to become a Participating Agency

The Federal Highway Administration (FHWA), in cooperation with the Missouri Department of Transportation (MoDOT), will prepare a First Tier Environmental Impact Statement (FTEIS) to consider impacts of improvements to I-70 from the end of the last ramp termini east of the Missouri and Kansas state line to east of the I-470 interchange, including the entire Kansas City, Missouri's Downtown Central Business District (CBD) Freeway Loop in Jackson County Missouri. The project length is approximately 18 miles (20 miles including all segments of the downtown loop). We have enclosed a copy of a Project Location Map for your review.

<u>Project Background:</u> MoDOT in partnership with the Mid-America Regional Council (MARC) and the Kansas City Area Transportation Authority (KCATA) completed a Major Investment Study (MIS) for the I-70 corridor in Jackson County in November 2004. The MIS evaluated the I-70 corridor in a general nature and recommended an improvement strategy that the reconstructing and widening of the existing facility from the Kansas City, Missouri's Downtown CBD Freeway Loop to the Route F/H interchange in Oak Grove, Missouri. This strategy also included the redesigning access and interchanges for the entire CBD Freeway Loop.

Mr. Hainje June 26, 2008 Page 2

FHWA and MoDOT are now preparing a FTEIS to develop an improvement strategy for the highway elements of the I-70 corridor, using the MIS Statement of Purpose and Need and Strategy Packages as their foundation. The FTEIS will also coordinate with completed and ongoing studies. These studies are the I-70 Transit Alternatives Analysis, Kansas City, Missouri's Downtown CBD Study, I-29/I-35 Paseo Bridge Corridor EIS, I-470 Purpose and Need study and the I-70 Supplemental EIS study.

Strategies to be considered include (1) no build; (2) highway widening and interchange improvements strategies; and (3) Transportation System Management (TSM). The First Tier EIS will seek to determine sections of independent utility over this 18-mile stretch of I-70 that will become the basis for second tier environmental studies.

<u>Participating Agency Invitation:</u> The purpose of this letter is to initiate coordination with your organization. Section 6002 of the current federal highway bill known as the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Section 6002 of SAFETEA-LU, which focuses on efficient environmental reviews for project decision-making, expands the involvement agencies and the public can have in the transportation decision making process. As part of the environmental review process, the lead agencies (FHWA and MoDOT) must identify any other Federal and non-Federal agencies that may have a specific interest in the project and invite these agencies to become participating agencies in the environmental review process.

Your agency has been identified as one that may have an interest in the I-70 FTEIS, because of the following:

- Your jurisdiction over emergency preparedness.
- Your jurisdiction and expertise regarding floodplains and floodplain management.

Accordingly, your agency is being extended this invitation to become a participating agency for the project.

Role as a Participating Agency: As a participating agency for the I-70 FTEIS, you will be afforded the opportunity, together with the public, to be involved in defining the purpose of and need for the project, as well as in determining the range of alternatives to be considered. You will be asked to:

- Provide input on the impact assessment methodologies for your agency's area of expertise;
- Participate in coordination meetings, conference calls, and joint field reviews, as appropriate; and

Mr. Hainje June 26, 2008 Page 3

> Review and comment on sections of the pre-draft and pre-final environmental documents to communicate any concerns of your agency on the adequacy of the document, the alternatives considered, and the anticipated impacts and mitigation.

A detailed coordination plan will be provided at the first agency coordination meeting, as discussed below.

<u>Project Agency Meeting and Tour:</u> Your agencies designated representative(s) are invited to attend the first agency coordination meeting and Study Area tour. The meeting will be held on Wednesday July 16, 2008 at 1:00 PM at the MoDOT District 4 Office, 600 NE Colbern Road, Lee's Summit, MO 64086. The coordination meeting is expected to last 1.5 hours and will be followed by a 1.5 hour tour of the Study Area. At the meeting, the Study Team will provide an overview of the study process and key issues. There will also be time for agencies to provide input on key concerns regarding the projects potential environmental or socioeconomic impacts. Following the meeting, the meeting materials and notes will be sent to agency representatives who are unable to attend.

<u>Response Requested:</u> We request that your agency provide confirmation on whether it is accepting or declining the invitation to become a participating agency. The acceptance or declination of this invitation may be transmitted electronically to Allan Zafft at Allan.Zafft@modot.mo.gov; please include the title of the official responding or via mail to the MoDOT District 4 office shown above. Responses should be transmitted to this office no later than July 15, 2008.

As a Federal agency, if you elect not to become a participating agency, you must decline this invitation in writing. Your letter declining the invitation must indicate that your agency has no jurisdiction or authority with respect to the project, no expertise or information relevant to the project, and does not intend to submit comments on the project.

Your assistance is greatly appreciated and we look forward to working with you as the study progresses. If you have questions regarding this invitation, please contact Allan Zafft at 816-622-0687.

Sincerely,

David B. Nichols, P.E. Director of Program Delivery

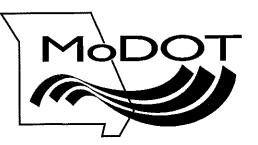
Enclosures

Mr. Hainje June 26, 2008 Page 4

Copy: Mr. Allen Masuda-FHWA

Mr. Matt Burcham-de Mr. Allan Zafft-4tp

Missouri Department of Transportation



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Pete K. Rahn, Director



2007 Missouri Quality Award Winner

June 26, 2008

Charlie Scott
Field Supervisor
U.S. Fish and Wildlife Service
Columbia Ecological Services Field Office
101 Park DeVille Drive, Suite A
Columbia, MO 65203-0057

Dear Mr. Scott:

Subject:

I-70 First Tier Environmental Impact Statement

I-70 Jackson County, MO MoDOT Job No. J4I1486B

Request to become a Participating Agency

The Federal Highway Administration (FHWA), in cooperation with the Missouri Department of Transportation (MoDOT), will prepare a First Tier Environmental Impact Statement (FTEIS) to consider impacts of improvements to I-70 from the end of the last ramp termini east of the Missouri and Kansas state line to east of the I-470 interchange, including the entire Kansas City, Missouri's Downtown Central Business District (CBD) Freeway Loop in Jackson County Missouri. The project length is approximately 18 miles (20 miles including all segments of the downtown loop). We have enclosed a copy of a Project Location Map for your review.

<u>Project Background:</u> MoDOT in partnership with the Mid-America Regional Council (MARC) and the Kansas City Area Transportation Authority (KCATA) completed a Major Investment Study (MIS) for the I-70 corridor in Jackson County in November 2004. The MIS evaluated the I-70 corridor in a general nature and recommended an improvement strategy that the reconstructing and widening of the existing facility from the Kansas City, Missouri's Downtown CBD Freeway Loop to the Route F/H interchange in Oak Grove, Missouri. This strategy also included the redesigning access and interchanges for the entire CBD Freeway Loop.

Mr. Scott June 26, 2008 Page 2

FHWA and MoDOT are now preparing a FTEIS to develop an improvement strategy for the highway elements of the I-70 corridor, using the MIS Statement of Purpose and Need and Strategy Packages as their foundation. The FTEIS will also coordinate with completed and ongoing studies. These studies are the I-70 Transit Alternatives Analysis, Kansas City, Missouri's Downtown CBD Study, I-29/I-35 Paseo Bridge Corridor EIS, I-470 Purpose and Need study and the I-70 Supplemental EIS study.

Strategies to be considered include (1) no build; (2) highway widening and interchange improvements strategies; and (3) Transportation System Management (TSM). The First Tier EIS will seek to determine sections of independent utility over this 18-mile stretch of I-70 that will become the basis for second tier environmental studies.

<u>Participating Agency Invitation:</u> The purpose of this letter is to initiate coordination with your organization. Section 6002 of the current federal highway bill known as the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Section 6002 of SAFETEA-LU, which focuses on efficient environmental reviews for project decision-making, expands the involvement agencies and the public can have in the transportation decision making process. As part of the environmental review process, the lead agencies (FHWA and MoDOT) must identify any other Federal and non-Federal agencies that may have a specific interest in the project and invite these agencies to become participating agencies in the environmental review process.

Your agency has been identified as one that may have an interest in the I-70 FTEIS, because of the following:

- Your jurisdiction over threatened and endangered species and their habitat.
- Your expertise in the protection of wildlife resources and their habitat.

Accordingly, your agency is being extended this invitation to become a participating agency for the project.

<u>Role as a Participating Agency:</u> As a participating agency for the I-70 FTEIS, you will be afforded the opportunity, together with the public, to be involved in defining the purpose of and need for the project, as well as in determining the range of alternatives to be considered. You will be asked to:

- Provide input on the impact assessment methodologies for your agency's area of expertise;
- Participate in coordination meetings, conference calls, and joint field reviews, as appropriate; and

 Review and comment on sections of the pre-draft and pre-final environmental documents to communicate any concerns of your agency on the adequacy of the document, the alternatives considered, and the anticipated impacts and mitigation.

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As a Federal agency, if you elect not to become a participating agency, you must decline this invitation in writing. Your letter declining the invitation must indicate that your agency has no jurisdiction or authority with respect to the project, no expertise or information relevant to the project, and does not intend to submit comments on the project.

Your assistance is greatly appreciated and we look forward to working with you as the study progresses. If you have questions regarding this invitation, please contact Allan Zafft at 816-622-0687.

Sincerely,

David B. Nichols, P.E. Director of Program Delivery

Enclosures

Mr. Scott June 26, 2008 Page 4

Copy: Mr. Allen Masuda-FHWA

Mr. Matt Burcham-de Mr. Allan Zafft-4tp

Missouri Department of Transportation



Pete K. Rahn, Director

105 West Capitol Avenue P.O. Box 270 Jefferson City, MO 65102 (573) 751-2551 Fex (573) 751-6555 www.modot.org



2007 Missouri Quality Award Winner

June 26, 2008

Roger Hanson State Conservationist Missouri NRCS State Office Parkdale Center, Suite 250 601 Business Loop 70 West Columbia, MO 65203-2546

Dear Mr. Hanson:

Subject:

I-70 First Tier Environmental Impact Statement

I-70 Jackson County, MO MoDOT Job No. J4I1486B

Request to become a Participating Agency

The Federal Highway Administration (FHWA), in cooperation with the Missouri Department of Transportation (MoDOT), will prepare a First Tier Environmental Impact Statement (FTEIS) to consider impacts of improvements to I-70 from the end of the last ramp termini east of the Missouri and Kansas state line to east of the I-470 interchange, including the entire Kansas City, Missouri's Downtown Central Business District (CBD) Freeway Loop in Jackson County Missouri. The project length is approximately 18 miles (20 miles including all segments of the downtown loop). We have enclosed a copy of a Project Location Map for your review.

<u>Project Background:</u> MoDOT in partnership with the Mid-America Regional Council (MARC) and the Kansas City Area Transportation Authority (KCATA) completed a Major Investment Study (MIS) for the I-70 corridor in Jackson County in November 2004. The MIS evaluated the I-70 corridor in a general nature and recommended an improvement strategy that the reconstructing and widening of the existing facility from the Kansas City, Missouri's Downtown CBD Freeway Loop to the Route F/H interchange in Oak Grove, Missouri. This strategy also included the redesigning access and interchanges for the entire CBD Freeway Loop.

Mr. Hanson June 26, 2008 Page 2

FHWA and MoDOT are now preparing a FTEIS to develop an improvement strategy for the highway elements of the I-70 corridor, using the MIS Statement of Purpose and Need and Strategy Packages as their foundation. The FTEIS will also coordinate with completed and ongoing studies. These studies are the I-70 Transit Alternatives Analysis, Kansas City, Missouri's Downtown CBD Study, I-29/I-35 Paseo Bridge Corridor EIS, I-470 Purpose and Need study and the I-70 Supplemental EIS study.

Strategies to be considered include (1) no build; (2) highway widening and interchange improvements strategies; and (3) Transportation System Management (TSM). The First Tier EIS will seek to determine sections of independent utility over this 18-mile stretch of I-70 that will become the basis for second tier environmental studies.

<u>Participating Agency Invitation:</u> The purpose of this letter is to initiate coordination with your organization. Section 6002 of the current federal highway bill known as the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Section 6002 of SAFETEA-LU, which focuses on efficient environmental reviews for project decision-making, expands the involvement agencies and the public can have in the transportation decision making process. As part of the environmental review process, the lead agencies (FHWA and MoDOT) must identify any other Federal and non-Federal agencies that may have a specific interest in the project and invite these agencies to become participating agencies in the environmental review process.

Your agency has been identified as one that may have an interest in the I-70 FTEIS, because of the following:

- Your jurisdiction over farmland and agricultural resources.
- Your expertise with water, soil, and plant resources.

Accordingly, your agency is being extended this invitation to become a participating agency for the project.

Role as a Participating Agency: As a participating agency for the I-70 FTEIS, you will be afforded the opportunity, together with the public, to be involved in defining the purpose of and need for the project, as well as in determining the range of alternatives to be considered. You will be asked to:

- Provide input on the impact assessment methodologies for your agency's area of expertise;
- Participate in coordination meetings, conference calls, and joint field reviews, as appropriate; and

Mr. Hanson June 26, 2008 Page 3

> Review and comment on sections of the pre-draft and pre-final environmental documents to communicate any concerns of your agency on the adequacy of the document, the alternatives considered, and the anticipated impacts and mitigation.

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Sincerely,

David B. Nichols, P.E. Director of Program Delivery

Enclosures

Mr. Hanson June 26, 2008 Page 4

Copy: Mr. Allen Masuda-FHWA

Mr. Matt Burcham-de Mr. Allan Zafft-4tp

Mr. Dan Switzner-MO NRCS Clay and Jackson County Field Office



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Pete K. Rahn, Director



2007 Missouri Quality Award Winner

June 26, 2008

Col. Roger Wilson, Jr.
District Engineer
U.S. Army Corps of Engineers, Kansas City District
601 East 12th Street
Kansas City, MO 64106

Dear Mr. Wilson, Jr.:

Subject:

I-70 First Tier Environmental Impact Statement

I-70 Jackson County, MO MoDOT Job No. J4I1486B

Request to become a Participating Agency

The Federal Highway Administration (FHWA), in cooperation with the Missouri Department of Transportation (MoDOT), will prepare a First Tier Environmental Impact Statement (FTEIS) to consider impacts of improvements to I-70 from the end of the last ramp termini east of the Missouri and Kansas state line to east of the I-470 interchange, including the entire Kansas City, Missouri's Downtown Central Business District (CBD) Freeway Loop in Jackson County Missouri. The project length is approximately 18 miles (20 miles including all segments of the downtown loop). We have enclosed a copy of a Project Location Map for your review.

Col. Wilson, Jr. June 26, 2008 Page 2

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<u>Participating Agency Invitation:</u> The purpose of this letter is to initiate coordination with your organization. Section 6002 of the current federal highway bill known as the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Section 6002 of SAFETEA-LU, which focuses on efficient environmental reviews for project decision-making, expands the involvement agencies and the public can have in the transportation decision making process. As part of the environmental review process, the lead agencies (FHWA and MoDOT) must identify any other Federal and non-Federal agencies that may have a specific interest in the project and invite these agencies to become participating agencies in the environmental review process.

Your agency has been identified as one that may have an interest in the I-70 FTEIS, because of the following:

- Your jurisdiction over navigable waters and other waters of the United States.
- Your expertise regarding water resources.
- Your jurisdiction and expertise regarding flood management.

Accordingly, your agency is being extended this invitation to become a participating agency for the project.

- Provide input on the impact assessment methodologies for your agency's area of expertise;
- Participate in coordination meetings, conference calls, and joint field reviews, as appropriate; and

Col. Wilson, Jr. June 26, 2008 Page 3

> Review and comment on sections of the pre-draft and pre-final environmental documents to communicate any concerns of your agency on the adequacy of the document, the alternatives considered, and the anticipated impacts and mitigation.

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<u>Project Agency Meeting and Tour:</u> Your agencies designated representative(s) are invited to attend the first agency coordination meeting and Study Area tour. The meeting will be held on Wednesday July 16, 2008 at 1:00 PM at the MoDOT District 4 Office, 600 NE Colbern Road, Lee's Summit, MO 64086. The coordination meeting is expected to last 1.5 hours and will be followed by a 1.5 hour tour of the Study Area. At the meeting, the Study Team will provide an overview of the study process and key issues. There will also be time for agencies to provide input on key concerns regarding the projects potential environmental or socioeconomic impacts. Following the meeting, the meeting materials and notes will be sent to agency representatives who are unable to attend.

<u>Response Requested:</u> We request that your agency provide confirmation on whether it is accepting or declining the invitation to become a participating agency. The acceptance or declination of this invitation may be transmitted electronically to Allan Zafft at Allan.Zafft@modot.mo.gov; please include the title of the official responding or via mail to the MoDOT District 4 office shown above. Responses should be transmitted to this office no later than July 15, 2008.

As a Federal agency, if you elect not to become a participating agency, you must decline this invitation in writing. Your letter declining the invitation must indicate that your agency has no jurisdiction or authority with respect to the project, no expertise or information relevant to the project, and does not intend to submit comments on the project.

Your assistance is greatly appreciated and we look forward to working with you as the study progresses. If you have questions regarding this invitation, please contact Allan Zafft at 816-622-0687.

Sincerely,

David B. Nichols, P.E. Director of Program Delivery

Enclosures

Col. Wilson, Jr. June 26, 2008 Page 4

Copy: Mr. Allen Masuda-FHWA Mr. Matt Burcham-de Mr. Allan Zafft-4tp



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Pete K. Rahn, Director



2007 Missouri Quality Award Winner

June 26, 2008

Michael Sanders
Jackson County Executive
Jackson County - County Executive Office
415 East 12th Street, 2nd Floor
Kansas City Courthouse
Kansas City, MO 64106

Dear Mr. Sanders:

Subject:

I-70 First Tier Environmental Impact Statement

I-70 Jackson County, MO MoDOT Job No. J4I1486B

Request to become a Participating Agency

The Federal Highway Administration (FHWA), in cooperation with the Missouri Department of Transportation (MoDOT), will prepare a First Tier Environmental Impact Statement (FTEIS) to consider impacts of improvements to I-70 from the end of the last ramp termini east of the Missouri and Kansas state line to east of the I-470 interchange, including the entire Kansas City, Missouri's Downtown Central Business District (CBD) Freeway Loop in Jackson County Missouri. The project length is approximately 18 miles (20 miles including all segments of the downtown loop). We have enclosed a copy of a Project Location Map for your review.

Mr. Sanders June 26, 2008 Page 2

FHWA and MoDOT are now preparing a FTEIS to develop an improvement strategy for the highway elements of the I-70 corridor, using the MIS Statement of Purpose and Need and Strategy Packages as their foundation. The FTEIS will also coordinate with completed and ongoing studies. These studies are the I-70 Transit Alternatives Analysis, Kansas City, Missouri's Downtown CBD Study, I-29/I-35 Paseo Bridge Corridor EIS, I-470 Purpose and Need study and the I-70 Supplemental EIS study.

Strategies to be considered include (1) no build; (2) highway widening and interchange improvements strategies; and (3) Transportation System Management (TSM). The First Tier EIS will seek to determine sections of independent utility over this 18-mile stretch of I-70 that will become the basis for second tier environmental studies.

<u>Participating Agency Invitation:</u> The purpose of this letter is to initiate coordination with your organization. Section 6002 of the current federal highway bill known as the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Section 6002 of SAFETEA-LU, which focuses on efficient environmental reviews for project decision-making, expands the involvement agencies and the public can have in the transportation decision making process. As part of the environmental review process, the lead agencies (FHWA and MoDOT) must identify any other Federal and non-Federal agencies that may have a specific interest in the project and invite these agencies to become participating agencies in the environmental review process.

Your agency has been identified as one that may have an interest in the I-70 FTEIS, because of the following:

- Your jurisdiction as a County over the Study Area.
- Your expertise with local planning, economic development, community features, and resources.

Accordingly, your agency is being extended this invitation to become a participating agency for the project.

- Provide input on the impact assessment methodologies for your agency's area of expertise;
- Participate in coordination meetings, conference calls, and joint field reviews, as appropriate; and

 Review and comment on sections of the pre-draft and pre-final environmental documents to communicate any concerns of your agency on the adequacy of the document, the alternatives considered, and the anticipated impacts and mitigation.

A detailed coordination plan will be provided at the first agency coordination meeting, as discussed below.

<u>Project Agency Meeting and Tour:</u> Your agencies designated representative(s) are invited to attend the first agency coordination meeting and Study Area tour. The meeting will be held on Wednesday July 16, 2008 at 1:00 PM at the MoDOT District 4 Office, 600 NE Colbern Road, Lee's Summit, MO 64086. The coordination meeting is expected to last 1.5 hours and will be followed by a 1.5 hour tour of the Study Area. At the meeting, the Study Team will provide an overview of the study process and key issues. There will also be time for agencies to provide input on key concerns regarding the projects potential environmental or socioeconomic impacts. Following the meeting, the meeting materials and notes will be sent to agency representatives who are unable to attend.

<u>Response Requested:</u> We request that your agency provide confirmation on whether it is accepting or declining the invitation to become a participating agency. The acceptance or declination of this invitation may be transmitted electronically to Allan Zafft at Allan.Zafft@modot.mo.gov; please include the title of the official responding or via mail to the MoDOT District 4 office shown above. Responses should be transmitted to this office no later than July 15, 2008.

Your assistance is greatly appreciated and we look forward to working with you as the study progresses. If you have questions regarding this invitation, please contact Allan Zafft at 816-622-0687.

Sincerely,

David B. Nichols, P.E. Director of Program Delivery

Enclosures

Copy: Mr. Allen Masuda-FHWA

Mr. Matt Burcham-de

Mr. Allan Zafft-4tp

Mr. Robbie Makinen-Jackson County-Economic Development

Mr. Jerry Page-Jackson County-Public Works



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2007 Missouri Quality Award Winner

June 26, 2008

Robert Heacock
City Manager
City of Independence - City Manager's Office
111 East Maple Street
Third Floor, City Hall
Independence, MO 64050

Dear Mr. Heacock:

Subject:

I-70 First Tier Environmental Impact Statement

I-70 Jackson County, MO MoDOT Job No. J4I1486B

Request to become a Participating Agency

The Federal Highway Administration (FHWA), in cooperation with the Missouri Department of Transportation (MoDOT), will prepare a First Tier Environmental Impact Statement (FTEIS) to consider impacts of improvements to I-70 from the end of the last ramp termini east of the Missouri and Kansas state line to east of the I-470 interchange, including the entire Kansas City, Missouri's Downtown Central Business District (CBD) Freeway Loop in Jackson County Missouri. The project length is approximately 18 miles (20 miles including all segments of the downtown loop). We have enclosed a copy of a Project Location Map for your review.

Mr. Heacock June 26, 2008 Page 2

FHWA and MoDOT are now preparing a FTEIS to develop an improvement strategy for the highway elements of the I-70 corridor, using the MIS Statement of Purpose and Need and Strategy Packages as their foundation. The FTEIS will also coordinate with completed and ongoing studies. These studies are the I-70 Transit Alternatives Analysis, Kansas City, Missouri's Downtown CBD Study, I-29/I-35 Paseo Bridge Corridor EIS, I-470 Purpose and Need study and the I-70 Supplemental EIS study.

Strategies to be considered include (1) no build; (2) highway widening and interchange improvements strategies; and (3) Transportation System Management (TSM). The First Tier EIS will seek to determine sections of independent utility over this 18-mile stretch of I-70 that will become the basis for second tier environmental studies.

<u>Participating Agency Invitation:</u> The purpose of this letter is to initiate coordination with your organization. Section 6002 of the current federal highway bill known as the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Section 6002 of SAFETEA-LU, which focuses on efficient environmental reviews for project decision-making, expands the involvement agencies and the public can have in the transportation decision making process. As part of the environmental review process, the lead agencies (FHWA and MoDOT) must identify any other Federal and non-Federal agencies that may have a specific interest in the project and invite these agencies to become participating agencies in the environmental review process.

Your agency has been identified as one that may have an interest in the I-70 FTEIS, because of the following:

- Your jurisdiction as a City over portions of the Study Area.
- Your expertise with local planning, economic development, community features, and resources.

Accordingly, your agency is being extended this invitation to become a participating agency for the project.

- Provide input on the impact assessment methodologies for your agency's area of expertise;
- Participate in coordination meetings, conference calls, and joint field reviews, as appropriate; and

Mr. Heacock June 26, 2008 Page 3

> Review and comment on sections of the pre-draft and pre-final environmental documents to communicate any concerns of your agency on the adequacy of the document, the alternatives considered, and the anticipated impacts and mitigation.

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Your assistance is greatly appreciated and we look forward to working with you as the study progresses. If you have questions regarding this invitation, please contact Allan Zafft at 816-622-0687.

Sincerely,

David B. Nichols, P.E. Director of Program Delivery

Enclosures

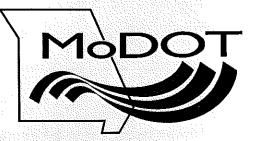
Copy: Mr. Allen Masuda-FHWA

Mr. Matt Burcham-de

Mr. Allan Zafft-4tp

Ms. Jennifer Clark-City of Independence-Community Development

Mr. John Powell-City of Independence-Public Works



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Pete K. Rahn, Director



2007 Missouri Quality Award Winner

June 26, 2008

Mark Huffer General Manager Kansas City Area Transit Authority 1200 East 18th Street Kansas City, MO 64108

Dear Mr. Huffer:

Subject:

I-70 First Tier Environmental Impact Statement

I-70 Jackson County, MO MoDOT Job No. J4I1486B

Request to become a Participating Agency

The Federal Highway Administration (FHWA), in cooperation with the Missouri Department of Transportation (MoDOT), will prepare a First Tier Environmental Impact Statement (FTEIS) to consider impacts of improvements to I-70 from the end of the last ramp termini east of the Missouri and Kansas state line to east of the I-470 interchange, including the entire Kansas City, Missouri's Downtown Central Business District (CBD) Freeway Loop in Jackson County Missouri. The project length is approximately 18 miles (20 miles including all segments of the downtown loop). We have enclosed a copy of a Project Location Map for your review.

Mr. Huffer June 26, 2008 Page 2

FHWA and MoDOT are now preparing a FTEIS to develop an improvement strategy for the highway elements of the I-70 corridor, using the MIS Statement of Purpose and Need and Strategy Packages as their foundation. The FTEIS will also coordinate with completed and ongoing studies. These studies are the I-70 Transit Alternatives Analysis, Kansas City, Missouri's Downtown CBD Study, I-29/I-35 Paseo Bridge Corridor EIS, I-470 Purpose and Need study and the I-70 Supplemental EIS study.

Strategies to be considered include (1) no build; (2) highway widening and interchange improvements strategies; and (3) Transportation System Management (TSM). The First Tier EIS will seek to determine sections of independent utility over this 18-mile stretch of I-70 that will become the basis for second tier environmental studies.

<u>Participating Agency Invitation:</u> The purpose of this letter is to initiate coordination with your organization. Section 6002 of the current federal highway bill known as the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Section 6002 of SAFETEA-LU, which focuses on efficient environmental reviews for project decision-making, expands the involvement agencies and the public can have in the transportation decision making process. As part of the environmental review process, the lead agencies (FHWA and MoDOT) must identify any other Federal and non-Federal agencies that may have a specific interest in the project and invite these agencies to become participating agencies in the environmental review process.

Your agency has been identified as one that may have an interest in the I-70 FTEIS, because of the following:

Your jurisdiction and expertise regarding transit services in the region.

Accordingly, your agency is being extended this invitation to become a participating agency for the project.

- Provide input on the impact assessment methodologies for your agency's area of expertise;
- Participate in coordination meetings, conference calls, and joint field reviews, as appropriate; and

Mr. Huffer June 26, 2008 Page 3

> Review and comment on sections of the pre-draft and pre-final environmental documents to communicate any concerns of your agency on the adequacy of the document, the alternatives considered, and the anticipated impacts and mitigation.

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<u>Project Agency Meeting and Tour:</u> Your agencies designated representative(s) are invited to attend the first agency coordination meeting and Study Area tour. The meeting will be held on Wednesday July 16, 2008 at 1:00 PM at the MoDOT District 4 Office, 600 NE Colbern Road, Lee's Summit, MO 64086. The coordination meeting is expected to last 1.5 hours and will be followed by a 1.5 hour tour of the Study Area. At the meeting, the Study Team will provide an overview of the study process and key issues. There will also be time for agencies to provide input on key concerns regarding the projects potential environmental or socioeconomic impacts. Following the meeting, the meeting materials and notes will be sent to agency representatives who are unable to attend.

<u>Response Requested:</u> We request that your agency provide confirmation on whether it is accepting or declining the invitation to become a participating agency. The acceptance or declination of this invitation may be transmitted electronically to Allan Zafft at Allan.Zafft@modot.mo.gov; please include the title of the official responding or via mail to the MoDOT District 4 office shown above. Responses should be transmitted to this office no later than July 15, 2008.

Your assistance is greatly appreciated and we look forward to working with you as the study progresses. If you have questions regarding this invitation, please contact Allan Zafft at 816-622-0687.

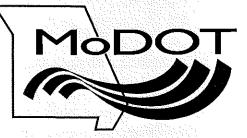
Sincerely,

David B. Nichols, P.E. Director of Program Delivery

Enclosures

Copy: Mr. Allen Masuda-FHWA

Mr. Matt Burcham-de Mr. Allan Zafft-4tp



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Pete K. Rahn, Director



2007 Missouri Quality Award Winner

June 26, 2008

Mell Henderson Director of Transportation Mid-America Regional Council 600 Broadway, Suite 200 Kansas City, MO 64105

Dear Mr. Henderson:

Subject:

I-70 First Tier Environmental Impact Statement

I-70 Jackson County, MO MoDOT Job No. J4I1486B

Request to become a Participating Agency

The Federal Highway Administration (FHWA), in cooperation with the Missouri Department of Transportation (MoDOT), will prepare a First Tier Environmental Impact Statement (FTEIS) to consider impacts of improvements to I-70 from the end of the last ramp termini east of the Missouri and Kansas state line to east of the I-470 interchange, including the entire Kansas City, Missouri's Downtown Central Business District (CBD) Freeway Loop in Jackson County Missouri. The project length is approximately 18 miles (20 miles including all segments of the downtown loop). We have enclosed a copy of a Project Location Map for your review.

Mr. Henderson June 26, 2008 Page 2

FHWA and MoDOT are now preparing a FTEIS to develop an improvement strategy for the highway elements of the I-70 corridor, using the MIS Statement of Purpose and Need and Strategy Packages as their foundation. The FTEIS will also coordinate with completed and ongoing studies. These studies are the I-70 Transit Alternatives Analysis, Kansas City, Missouri's Downtown CBD Study, I-29/I-35 Paseo Bridge Corridor EIS, I-470 Purpose and Need study and the I-70 Supplemental EIS study.

Strategies to be considered include (1) no build; (2) highway widening and interchange improvements strategies; and (3) Transportation System Management (TSM). The First Tier EIS will seek to determine sections of independent utility over this 18-mile stretch of I-70 that will become the basis for second tier environmental studies.

<u>Participating Agency Invitation:</u> The purpose of this letter is to initiate coordination with your organization. Section 6002 of the current federal highway bill known as the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Section 6002 of SAFETEA-LU, which focuses on efficient environmental reviews for project decision-making, expands the involvement agencies and the public can have in the transportation decision making process. As part of the environmental review process, the lead agencies (FHWA and MoDOT) must identify any other Federal and non-Federal agencies that may have a specific interest in the project and invite these agencies to become participating agencies in the environmental review process.

Your agency has been identified as one that may have an interest in the I-70 FTEIS, because of the following:

- · Your jurisdiction over regional planning.
- Your expertise with regional transportation assets, resources, and plans.

Accordingly, your agency is being extended this invitation to become a participating agency for the project.

- Provide input on the impact assessment methodologies for your agency's area of expertise;
- Participate in coordination meetings, conference calls, and joint field reviews, as appropriate; and

Mr. Henderson June 26, 2008 Page 3

> Review and comment on sections of the pre-draft and pre-final environmental documents to communicate any concerns of your agency on the adequacy of the document, the alternatives considered, and the anticipated impacts and mitigation.

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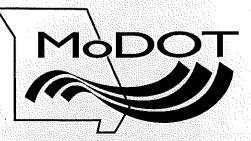
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Sincerely,

David B. Nichols, P.E. Director of Program Delivery

Enclosures

Copy: Mr. Allen Masuda-FHWA Mr. Matt Burcham-de Mr. Allan Zafft-4tp



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Pete K. Rahn, Director



2007 Missouri Quality Award Winner

June 26, 2008

Ronald Reynolds
Director
State Emergency Management Agency
P.O. Box 116
Jefferson City, MO 65102

Dear Mr. Reynolds:

Subject:

I-70 First Tier Environmental Impact Statement

I-70 Jackson County, MO MoDOT Job No. J4I1486B

Request to become a Participating Agency

The Federal Highway Administration (FHWA), in cooperation with the Missouri Department of Transportation (MoDOT), will prepare a First Tier Environmental Impact Statement (FTEIS) to consider impacts of improvements to I-70 from the end of the last ramp termini east of the Missouri and Kansas state line to east of the I-470 interchange, including the entire Kansas City, Missouri's Downtown Central Business District (CBD) Freeway Loop in Jackson County Missouri. The project length is approximately 18 miles (20 miles including all segments of the downtown loop). We have enclosed a copy of a Project Location Map for your review.

Mr. Reynolds June 26, 2008 Page 2

FHWA and MoDOT are now preparing a FTEIS to develop an improvement strategy for the highway elements of the I-70 corridor, using the MIS Statement of Purpose and Need and Strategy Packages as their foundation. The FTEIS will also coordinate with completed and ongoing studies. These studies are the I-70 Transit Alternatives Analysis, Kansas City, Missouri's Downtown CBD Study, I-29/I-35 Paseo Bridge Corridor EIS, I-470 Purpose and Need study and the I-70 Supplemental EIS study.

Strategies to be considered include (1) no build; (2) highway widening and interchange improvements strategies; and (3) Transportation System Management (TSM). The First Tier EIS will seek to determine sections of independent utility over this 18-mile stretch of I-70 that will become the basis for second tier environmental studies.

<u>Participating Agency Invitation:</u> The purpose of this letter is to initiate coordination with your organization. Section 6002 of the current federal highway bill known as the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Section 6002 of SAFETEA-LU, which focuses on efficient environmental reviews for project decision-making, expands the involvement agencies and the public can have in the transportation decision making process. As part of the environmental review process, the lead agencies (FHWA and MoDOT) must identify any other Federal and non-Federal agencies that may have a specific interest in the project and invite these agencies to become participating agencies in the environmental review process.

Your agency has been identified as one that may have an interest in the I-70 FTEIS, because of the following:

- Your jurisdiction over emergency preparedness and evacuation procedures.
- Your expertise in the protection of public safety during major disasters.

Accordingly, your agency is being extended this invitation to become a participating agency for the project.

- Provide input on the impact assessment methodologies for your agency's area of expertise;
- Participate in coordination meetings, conference calls, and joint field reviews, as appropriate; and

 Review and comment on sections of the pre-draft and pre-final environmental documents to communicate any concerns of your agency on the adequacy of the document, the alternatives considered, and the anticipated impacts and mitigation.

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Your assistance is greatly appreciated and we look forward to working with you as the study progresses. If you have questions regarding this invitation, please contact Allan Zafft at 816-622-0687.

Sincerely,

David B. Nichols, P.E. Director of Program Delivery

Enclosures

Copy: Mr. Allen Masuda-FHWA
Mr. Matt Burcham-de

Mr. Allan Zafft-4tp



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Pete K. Rahn, Director



2007 Missouri Quality Award Winner

June 26, 2008

Mark Nelson Forestry Regional Supervisor Missouri Department of Conservation 3424 NW Duncan Road Blue Springs, MO 64015

Dear Mr. Nelson:

Subject:

I-70 First Tier Environmental Impact Statement

I-70 Jackson County, MO MoDOT Job No. J4I1486B

Request to become a Participating Agency

The Federal Highway Administration (FHWA), in cooperation with the Missouri Department of Transportation (MoDOT), will prepare a First Tier Environmental Impact Statement (FTEIS) to consider impacts of improvements to I-70 from the end of the last ramp termini east of the Missouri and Kansas state line to east of the I-470 interchange, including the entire Kansas City, Missouri's Downtown Central Business District (CBD) Freeway Loop in Jackson County Missouri. The project length is approximately 18 miles (20 miles including all segments of the downtown loop). We have enclosed a copy of a Project Location Map for your review.

FHWA and MoDOT are now preparing a FTEIS to develop an improvement strategy for the highway elements of the I-70 corridor, using the MIS Statement of Purpose and Need and Strategy Packages as their foundation. The FTEIS will also coordinate with completed and ongoing studies. These studies are the I-70 Transit Alternatives Analysis, Kansas City, Missouri's Downtown CBD Study, I-29/I-35 Paseo Bridge Corridor EIS, I-470 Purpose and Need study and the I-70 Supplemental EIS study.

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Your agency has been identified as one that may have an interest in the I-70 FTEIS, because of the following:

- Your jurisdiction over outdoor recreation and conservation.
- Your expertise with fish and wildlife resources and their habitat.

Accordingly, your agency is being extended this invitation to become a participating agency for the project.

- Provide input on the impact assessment methodologies for your agency's area of expertise;
- Participate in coordination meetings, conference calls, and joint field reviews, as appropriate; and

Mr. Nelson June 26, 2008 Page 3

> Review and comment on sections of the pre-draft and pre-final environmental documents to communicate any concerns of your agency on the adequacy of the document, the alternatives considered, and the anticipated impacts and mitigation.

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Sincerely,

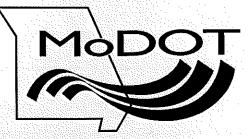
David B. Nichols, P.E. Director of Program Delivery

Enclosures

Copy: Mr. Allen Masuda-FHWA

Mr. Matt Burcham-de Mr. Allan Zafft-4tp

Mr. John Hoskins-Missouri Department of Conservation



105 West Capitol Avenue P.O. Box 270 Jefferson City, MO 65102 (573) 751-2551 Fax (573) 751-6555 www.modot.org

Pete K. Rahn, Director



2007 Missouri Quality Award Winner

June 26, 2008

John Hoskins Director Missouri Department of Conservation P.O. Box 180 Jefferson City, MO 65109

Dear Mr. Hoskins:

Subject:

I-70 First Tier Environmental Impact Statement

I-70 Jackson County, MO MoDOT Job No. J4I1486B

Request to become a Participating Agency

The Federal Highway Administration (FHWA), in cooperation with the Missouri Department of Transportation (MoDOT), will prepare a First Tier Environmental Impact Statement (FTEIS) to consider impacts of improvements to I-70 from the end of the last ramp termini east of the Missouri and Kansas state line to east of the I-470 interchange, including the entire Kansas City, Missouri's Downtown Central Business District (CBD) Freeway Loop in Jackson County Missouri. The project length is approximately 18 miles (20 miles including all segments of the downtown loop). We have enclosed a copy of a Project Location Map for your review.

FHWA and MoDOT are now preparing a FTEIS to develop an improvement strategy for the highway elements of the I-70 corridor, using the MIS Statement of Purpose and Need and Strategy Packages as their foundation. The FTEIS will also coordinate with completed and ongoing studies. These studies are the I-70 Transit Alternatives Analysis, Kansas City, Missouri's Downtown CBD Study, I-29/I-35 Paseo Bridge Corridor EIS, I-470 Purpose and Need study and the I-70 Supplemental EIS study.

Strategies to be considered include (1) no build; (2) highway widening and interchange improvements strategies; and (3) Transportation System Management (TSM). The First Tier EIS will seek to determine sections of independent utility over this 18-mile stretch of I-70 that will become the basis for second tier environmental studies.

<u>Participating Agency Invitation:</u> The purpose of this letter is to initiate coordination with your organization. Section 6002 of the current federal highway bill known as the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Section 6002 of SAFETEA-LU, which focuses on efficient environmental reviews for project decision-making, expands the involvement agencies and the public can have in the transportation decision making process. As part of the environmental review process, the lead agencies (FHWA and MoDOT) must identify any other Federal and non-Federal agencies that may have a specific interest in the project and invite these agencies to become participating agencies in the environmental review process.

Your agency has been identified as one that may have an interest in the I-70 FTEIS, because of the following:

- Your jurisdiction over outdoor recreation and conservation.
- Your expertise with fish and wildlife resources and their habitat.

Accordingly, your agency is being extended this invitation to become a participating agency for the project.

- Provide input on the impact assessment methodologies for your agency's area of expertise;
- Participate in coordination meetings, conference calls, and joint field reviews, as appropriate; and

Mr. Hoskins June 26, 2008 Page 3

> Review and comment on sections of the pre-draft and pre-final environmental documents to communicate any concerns of your agency on the adequacy of the document, the alternatives considered, and the anticipated impacts and mitigation.

A detailed coordination plan will be provided at the first agency coordination meeting, as discussed below.

<u>Project Agency Meeting and Tour:</u> Your agencies designated representative(s) are invited to attend the first agency coordination meeting and Study Area tour. The meeting will be held on Wednesday July 16, 2008 at 1:00 PM at the MoDOT District 4 Office, 600 NE Colbern Road, Lee's Summit, MO 64086. The coordination meeting is expected to last 1.5 hours and will be followed by a 1.5 hour tour of the Study Area. At the meeting, the Study Team will provide an overview of the study process and key issues. There will also be time for agencies to provide input on key concerns regarding the projects potential environmental or socioeconomic impacts. Following the meeting, the meeting materials and notes will be sent to agency representatives who are unable to attend.

<u>Response Requested:</u> We request that your agency provide confirmation on whether it is accepting or declining the invitation to become a participating agency. The acceptance or declination of this invitation may be transmitted electronically to Allan Zafft at Allan.Zafft@modot.mo.gov; please include the title of the official responding or via mail to the MoDOT District 4 office shown above. Responses should be transmitted to this office no later than July 15, 2008.

Your assistance is greatly appreciated and we look forward to working with you as the study progresses. If you have questions regarding this invitation, please contact Allan Zafft at 816-622-0687.

Sincerely,

David B. Nichols, P.E. Director of Program Delivery

Enclosures

Copy: Mr. Allen Masuda-FHWA

Mr. Matt Burcham-de

Mr. Allan Zafft-4tp

Mr. Mark Nelson-Missouri Department of Conservation



105 West Capitol Avenue P.O. Box 270 Jefferson City, MO 65102 (573) 751-2551 Fax (573) 751-6555 www.modot.org

Pete K. Rahn, Director



2007 Missouri Quality Award Winner

June 26, 2008

Dan Switzner
District Conservationist
MO NRCS Clay and Jackson Field Office
United Bank Building, Suite 100
1 Victory Lane Drive
Liberty, MO 64068-3813

Dear Mr. Switzner:

Subject:

1-70 First Tier Environmental Impact Statement

I-70 Jackson County, MO MoDOT Job No. J4I1486B

Request to become a Participating Agency

The Federal Highway Administration (FHWA), in cooperation with the Missouri Department of Transportation (MoDOT), will prepare a First Tier Environmental Impact Statement (FTEIS) to consider impacts of improvements to I-70 from the end of the last ramp termini east of the Missouri and Kansas state line to east of the I-470 interchange, including the entire Kansas City, Missouri's Downtown Central Business District (CBD) Freeway Loop in Jackson County Missouri. The project length is approximately 18 miles (20 miles including all segments of the downtown loop). We have enclosed a copy of a Project Location Map for your review.

Mr. Switzner June 26, 2008 Page 2

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Strategies to be considered include (1) no build; (2) highway widening and interchange improvements strategies; and (3) Transportation System Management (TSM). The First Tier EIS will seek to determine sections of independent utility over this 18-mile stretch of I-70 that will become the basis for second tier environmental studies.

<u>Participating Agency Invitation:</u> The purpose of this letter is to initiate coordination with your organization. Section 6002 of the current federal highway bill known as the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Section 6002 of SAFETEA-LU, which focuses on efficient environmental reviews for project decision-making, expands the involvement agencies and the public can have in the transportation decision making process. As part of the environmental review process, the lead agencies (FHWA and MoDOT) must identify any other Federal and non-Federal agencies that may have a specific interest in the project and invite these agencies to become participating agencies in the environmental review process.

Your agency has been identified as one that may have an interest in the I-70 FTEIS, because of the following:

- Your jurisdiction over farmland and agricultural resources.
- Your expertise with water, soil, and plant resources.

Accordingly, your agency is being extended this invitation to become a participating agency for the project.

- Provide input on the impact assessment methodologies for your agency's area of expertise;
- Participate in coordination meetings, conference calls, and joint field reviews, as appropriate; and

Mr. Switzner June 26, 2008 Page 3

> Review and comment on sections of the pre-draft and pre-final environmental documents to communicate any concerns of your agency on the adequacy of the document, the alternatives considered, and the anticipated impacts and mitigation.

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Your assistance is greatly appreciated and we look forward to working with you as the study progresses. If you have questions regarding this invitation, please contact Allan Zafft at 816-622-0687.

Sincerely,

David B. Nichols, P.E. Director of Program Delivery

Enclosures

Copy: Mr. Allen Masuda-FHWA

Mr. Matt Burcham-de Mr. Allan Zafft-4tp

Mr. Roger Hanson-Missouri NRCS State Office



105 West Capitol Avenue P.O. Box 270 Jefferson City, MO 65102 (573) 751-2551 Fax (573) 751-6555 www.modot.org

Pete K. Rahn, Director



2007 Missouri Quality Award Winner

June 26, 2008

Doyle Childers
Director
Missouri Department of Natural Resources
P.O. Box 176
Jefferson City, MO 65102

Dear Mr. Childers:

Subject:

1-70 First Tier Environmental Impact Statement

I-70 Jackson County, MO MoDOT Job No. J4I1486B

Request to become a Participating Agency

The Federal Highway Administration (FHWA), in cooperation with the Missouri Department of Transportation (MoDOT), will prepare a First Tier Environmental Impact Statement (FTEIS) to consider impacts of improvements to I-70 from the end of the last ramp termini east of the Missouri and Kansas state line to east of the I-470 interchange, including the entire Kansas City, Missouri's Downtown Central Business District (CBD) Freeway Loop in Jackson County Missouri. The project length is approximately 18 miles (20 miles including all segments of the downtown loop). We have enclosed a copy of a Project Location Map for your review.

Mr. Childers June 26, 2008 Page 2

FHWA and MoDOT are now preparing a FTEIS to develop an improvement strategy for the highway elements of the I-70 corridor, using the MIS Statement of Purpose and Need and Strategy Packages as their foundation. The FTEIS will also coordinate with completed and ongoing studies. These studies are the I-70 Transit Alternatives Analysis, Kansas City, Missouri's Downtown CBD Study, I-29/I-35 Paseo Bridge Corridor EIS, I-470 Purpose and Need study and the I-70 Supplemental EIS study.

Strategies to be considered include (1) no build; (2) highway widening and interchange improvements strategies; and (3) Transportation System Management (TSM). The First Tier EIS will seek to determine sections of independent utility over this 18-mile stretch of I-70 that will become the basis for second tier environmental studies.

<u>Participating Agency Invitation:</u> The purpose of this letter is to initiate coordination with your organization. Section 6002 of the current federal highway bill known as the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Section 6002 of SAFETEA-LU, which focuses on efficient environmental reviews for project decision-making, expands the involvement agencies and the public can have in the transportation decision making process. As part of the environmental review process, the lead agencies (FHWA and MoDOT) must identify any other Federal and non-Federal agencies that may have a specific interest in the project and invite these agencies to become participating agencies in the environmental review process.

Your agency has been identified as one that may have an interest in the I-70 FTEIS, because of the following:

- Your jurisdiction over parklands and other natural features and protection areas.
- Your expertise in the protection and enhancement of natural resources.

Accordingly, your agency is being extended this invitation to become a participating agency for the project.

- Provide input on the impact assessment methodologies for your agency's area of expertise;
- Participate in coordination meetings, conference calls, and joint field reviews, as appropriate; and

Mr. Childers June 26, 2008 Page 3

> Review and comment on sections of the pre-draft and pre-final environmental documents to communicate any concerns of your agency on the adequacy of the document, the alternatives considered, and the anticipated impacts and mitigation.

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Your assistance is greatly appreciated and we look forward to working with you as the study progresses. If you have questions regarding this invitation, please contact Allan Zafft at 816-622-0687.

Sincerely,

David B. Nichols, P.E. Director of Program Delivery

Enclosures

Copy: Mr. Allen Masuda-FHWA

Mr. Matt Burcham-de Mr. Allan Zafft-4tp

Mr. Mark Miles- MDNR, State Historic Preservation Office

Mr. Karl Fett-MDNR, Kansas City Office

Nazar, Christopher R

From:

Allan,Zafft@modot.mo.gov

Sent:

Thursday, October 09, 2008 12:43 PM

To:

cothern.joe@epa.gov; Shannon.Cave@mdc.mo.gov; Todd.Gemeinhardt@mdc.mo.gov; judith.deel@dnr.mo.gov; jane.beetem@dnr.mo.gov; David.Kacirek@mo.usda.gov;

Jason.Schneider@sema.dps.mo.gov; RONA@MARC.ORG; mhuffer@kcata.org;

djarrold@kcata.org; doconnor@kcata.org; jpowell@indepmo.org; dcoatsworth@indepmo.org;

Patty_Hilderbrand@kcmo.org; David_Park@kcmo.org; Tom_Degenhardt@kcmo.org peggy.casey@fhwa.dot.gov; Matthew.Burcham@modot.mo.gov; Nazar, Christopher R

Cc: Subject:

MoDOT Job No. J4I1486B, I-70 First Tier EIS, Draft Purpose and Need Technical

Memorandum

Dear Participating Agencies:

The Missouri Department of Transportation (MoDOT) have completed the Draft Purpose and Need Technical Memorandum for the I-70 First Tier Environmental Impact Statement (FTEIS) in the Kansas City, Missouri metro area. This project spans 18 miles of I-70 from the last ramp termini east of the Missouri - Kansas state line to just east of I-470 and includes all of the Kansas City, Missouri Downtown Freeway Loop.

As indicated in the I-70 FTEIS Public Involvement and Agency Coordination Plan (July 2008), participating agencies are afforded the opportunity to review the draft purpose and need statement for the I-70 FTEIS. Therefore, MoDOT is requesting your review on the Draft Purpose and Need Technical Memorandum.

Below is the MoDOT ftp website address to download the Draft Purpose and Need Technical Memorandum. If you experience any problems with downloading the document, please let me know and I can mail you a CD copy or hard copy ASAP.

ftp://ftp.modot.mo.gov/District4/J4I1486B/

Please e-mail me your review comments of the technical memorandum by Monday, November 10, 2008.

If you have questions, please contact me.

Sincerely,

Allan Zafft Transportation Planning Coordinator MoDOT - District 4

Phone: (816) 622-0687

E-mail: Allan.Zafft@modot.mo.gov

Nazar, Christopher R

From:

Allan.Zafft@modot.mo.gov

Sent:

Thursday, October 09, 2008 12:43 PM

To:

david.r.hibbs@usace.army.mil

Cc:

mark.d.frazier@usace.army.mil; John.D.Holm@nwk02.usace.army.mil;

Douglas.R.Berka@usace.army.mil; peggy.casey@fhwa.dot.gov;

Matthew.Burcham@modot.mo.gov; Nazar, Christopher R

Subject:

Project No. 2008-01254, I-70 First Tier EIS in the Kansas City, Missouri Metro Area, Draft

Purpose and Need Technical Memorandum

Dear Mr. Hibbs:

The Missouri Department of Transportation (MoDOT) have completed the Draft Purpose and Need Technical Memorandum for the I-70 First Tier Environmental Impact Statement (FTEIS) in the Kansas City, Missouri metro area (Project No. 2008-01254). This project spans 18 miles of I-70 from the last ramp termini east of the Missouri - Kansas state line to just east of I-470 and includes all of the Kansas City, Missouri Downtown Freeway Loop.

As indicated in the I-70 FTEIS Public Involvement and Agency Coordination Plan (July 2008), participating agencies are afforded the opportunity to review the draft purpose and need statement for the I-70 FTEIS. Therefore, MoDOT is requesting your review on the Draft Purpose and Need Technical Memorandum.

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ftp://ftp.modot.mo.gov/District4/J4I1486B/

Please e-mail me your review comments of the technical memorandum by Monday, November 10, 2008.

If you have questions, please contact me.

Sincerely,

Allan Zafft

Transportation Planning Coordinator

MoDOT - District 4 Phone: (816) 622-0687

E-mail: Allan.Zafft@modot.mo.gov



District 4 -- Kansas City Area 600 NE Colbern Road Lee's Summit, MO 64086 (816) 622-6500 Fax (816) 622-6323 Toll free 1-888 ASK MoDOT (1-888-ASK-6636) www.modot.mo.gov

Elizabeth A. Wright, District Engineer



2007 Missouri Quality Award Winner

October 9, 2008



Mr. Richard Hainje Regional Administrator, Region VII Federal Emergency Management Agency, Region VII 9221 Ward Parkway, Suite 300 Kansas City, MO 64114

Dear Mr. Hainje:

Subject:

I-70 First Tier Environmental Impact Statement

I-70 Jackson County, MO MoDOT Job No. J4I1486B

Draft Purpose and Need Technical Memorandum

The Missouri Department of Transportation have completed the Draft Purpose and Need Technical Memorandum for the I-70 First Tier Environmental Impact Statement (FTEIS) in the Kansas City, Missouri metro area. This project spans 18 miles of I-70 from the last ramp termini east of the Missouri – Kansas state line to just east of I-470 and includes all of the Kausas City, Missouri Downtown Freeway Loop.

As indicated in the I-70 FTEIS Public Involvement and Agency Coordination Plan (July 2008), participating agencies are afforded the opportunity to review the draft purpose and need statement for the project. Therefore, we have enclosed a copy of the Draft Purpose and Need Technical Memorandum for your agency's review. Please e-mail any comments to me at Allan.Zafft@modot.mo.gov by Monday, November 10, 2008.

If you have questions, please call me at (816) 622-0687.

Sincerely,

Allan Zafft

Transportation Planning Coordinator

Copy: Mr. Matt Burcham-de

allan Jifft

Nazar, Christopher R

From:

Allan,Zafft@modot.mo.gov

Sent:

Thursday, January 15, 2009 5:31 PM

To:

cothern.joe@epa.gov; Smith.StephenK@epamail.epa.gov; Tucker.Amber@epamail.epa.gov; Shannon.Cave@mdc.mo.gov; Todd.Gemeinhardt@mdc.mo.gov; judith.deel@dnr.mo.gov;

jane.beetem@dnr.mo.gov; David.Kacirek@mo.usda.gov;

Jason.Schneider@sema.dps.mo.gov; RONA@MARC.ORG; mhuffer@kcata.org;

djarrold@kcata.org; doconnor@kcata.org; jpowell@indepmo.org; dcoatsworth@indepmo.org;

TGarland@indepmo.org; Patty_Hilderbrand@kcmo.org; David_Park@kcmo.org;

Tom_Degenhardt@kcmo.org

Cc: Subject: peggy.casey@fhwa.dot.gov; Matthew.Burcham@modot.mo.gov; Nazar, Christopher R MoDOT Job No. J4I1486B, I-70 First Tier EIS, Draft Initial Strategy Packages Summary

Memorandum

Dear Participating Agencies:

The Missouri Department of Transportation (MoDOT) has completed the Draft Initial Strategy Packages Summary Memorandum for the I-70 First Tier Environmental Impact Statement (FTEIS) in the Kansas City, Missouri metro area. This project spans 18 miles of I-70 from the last ramp termini east of the Missouri - Kansas state line to just east of I-470 and includes all of the Kansas City, Missouri Downtown Freeway Loop.

As indicated in the I-70 FTEIS Public Involvement and Agency Coordination Plan (July 2008), participating agencies are afforded the opportunity to review the first tier strategies for the I-70 FTEIS. Therefore, MoDOT is requesting your review on the Draft Initial Strategy Packages Summary Memorandum. This document discusses the fifteen initial first tier strategy packages that were evaluated and screened down to four reasonable first strategy packages. Currently, MoDOT is holding an online public meeting from January 2 to 31, 2009 where you can review a detailed map of the proposed four reasonable first strategies. The online meeting is posted on the project website at www.modot.org/kansascity/metroi70 and it allows the general public to make comments via blog or e-mail about the reasonable first tier strategies.

Below is the MoDOT ftp website address to download the Draft Initial Strategy Packages Summary Memorandum. If you experience any problems with downloading the document, please let me know and I can mail you a CD copy or hard copy ASAP.

ftp://ftp.modot.mo.gov/District4/I~70%20FTEIS/

Please e-mail me your review comments of the Draft Initial Strategy Packages Summary Memorandum by Monday, February 16, 2009. Note: This is a draft document. Please do not circulate the Draft Initial Strategy Packages Summary Memorandum to the general public at this time.

Also, available at the MoDOT ftp website is the following document:
November 3, 2008 Resource Agency Group Meeting Minutes and Meeting
Handouts
July 16, 2008 Resource Agency Group Meeting Minutes and Study Area Tour
Notes
Draft Purpose and Need Technical Memorandum (Most Recent Version)
Draft Purpose and Need Technical Memorandum - Appendix (Most Recent
Version)
Draft Environmental Impact Assessment Methodologies Coordination
Memorandum (Most Recent Version)
Draft Public Involvement and Agency Coordination Plan (Most Recent
Version)

If you have questions, please contact me.

Sincerely,

Allan Zafft Transportation Planning Coordinator
MoDOT - District 4
Phone: (816) 622-0687
E-mail: Allan.Zafft@modot.mo.gov

From: Allan.Zafft@modot.mo.gov

Sent: Thursday, January 15, 2009 5:25 PM

To: david.r.hibbs@usace.army.mil

Cc: Douglas.R.Berka@usace.army.mil; peggy.casey@fhwa.dot.gov;

Matthew.Burcham@modot.mo.gov; Nazar, Christopher R

Subject: Project No. 2008-01254, I-70 First Tier EIS, Draft Initial Strategy Packages Summary

Memorandum

Dear Mr. Hibbs:

The Missouri Department of Transportation (MoDOT) has completed the Draft Initial Strategy Packages Summary Memorandum for the I-70 First Tier Environmental Impact Statement (FTEIS) in the Kansas City, Missouri metro area (Project No. 2008-01254). This project spans 18 miles of I-70 from the last ramp termini east of the Missouri - Kansas state line to just east of I-470 and includes all of the Kansas City, Missouri Downtown Freeway Loop.

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July 16, 2008 Resource Agency Group Meeting Minutes and Study Area Tour

Draft Purpose and Need Technical Memorandum (Most Recent Version)

Draft Purpose and Need Technical Memorandum - Appendix (Most Recent Version)

Draft Environmental Impact Assessment Methodologies Coordination Memorandum (Most Recent Version)

Draft Public Involvement and Agency Coordination Plan (Most Recent Version)

If you have questions, please contact me.

Sincerely,

Allan Zafft

Transportation Planning Coordinator

MoDOT - District 4 Phone: (816) 622-0687

E-mail: Allan.Zafft@modot.mo.gov



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 7 901 NORTH 5TH STREET KANSAS CITY, KANSAS 66101

0 7 AUG 2009

Matt Burcham Senior Environmental Specialist P.O. Box 270 Jefferson City, MO 65102

Dear Mr. Burcham:

RE: Participating Agency for the First Tier I-70 Environmental Impact Statement, Jackson County, Missouri (MoDOT Job No. J4I1486B)

This letter is to inform you that the U.S. Environmental Protection Agency, Region 7, accepts your invitation to be a participating agency in the preparation of an environmental impact statement for this project. We look forward to participating in the coordination meetings and providing comments as appropriate.

If you have any questions regarding this letter, please contact me at 913-551-7148 or cothern.joe@epa.gov.

Sincerely,

Joseph Cothern

NEPA Team Leader

Environmental Services Division





DEPARTMENT OF THE ARMY

KANSAS CITY DISTRICT, CORPS OF ENGINEERS 700 FEDERAL BUILDING KANSAS CITY, MISSOURI 64106-2896

July 10, 2008



attention of: Regulatory Branch

(2008-01254)

David B. Nichols, P.E. Director of Program Delivery Missouri Department of Transportation, District No. 4 600 Northeast Colbern Road Lee's Summit, Missouri 64086

Dear Mr. Nichols:

This is in response to your letter, dated June 26, 2008, requesting our participation in the preparation of the First Tier Environmental Impact Statement (FTEIS) for the proposed Interstate 70 improvement project in the Kansas City, Missouri metro area.

The project corridor as outlined in your letter is of interest to us because of our regulatory authority under the Clean Water Act (33 U.S.C. 1344) and because of our Blue River Channel Modification Project, a cooperative effort with the City of Kansas City, Missouri. As a result, we accept the invitation to assist as a participating agency in the preparation of the FTEIS.

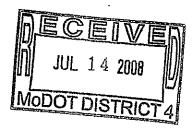
This project has been assigned number 2008-01254. Please reference this number in all inquiries and correspondence concerning this project.

If you have questions, please contact Mr. Mark Frazier, Chief, Regulatory Branch, at (816) 389-3664, or Mr. John Holm, Project Manager, at (816) 389-3111.

Sincerely,

David R. Hibbs Regulatory Program Manager

Operations Division





Matt Blunt, Governor . Doyle Childers, Director

T OF NATURAL RESOURCES

www.dnr.mo.gov

Mr. David B. Nichols, P.E.
Director of Program Delivery
Missouri Department of Transportation
P.O. Box 270
Jefferson City, Missouri 65102

Dear Mr. Nichols:

The Missouri Department of Natural Resources (department) accepts the invitation from the Missouri Department of Transportation (MoDOT) to act as a Participating Agency on development of a First Tier Environmental Impact Statement (EIS) for I-70 in Jackson County, Missouri.

The department understands that as a Participating Agency, we will work to:

- (1) provide meaningful and early input on the purpose and need for the project, the range of alternatives for consideration, as well as methodologies and the level of detail required in the alternatives analysis;
- (2) participate in coordination meetings and joint field reviews as appropriate; and
- (3) provide timely review and comment on environmental documents developed during this process. Such comments will include any concerns the department may have regarding the adequacy of the documents, the alternatives considered, and anticipated impacts and mitigation.

Thank you for inviting the department to participate in this process. We look forward to working with you on this project. If you have any questions or require further information, please contact me at 573-751-3195. My address for correspondence is Department of Natural Resources, P.O. Box 176, Jefferson City, MO 65102. Thank you.

Sincerely,

DEPARTMENT OF NATURAL RESOURCES

Jane Beetem

NEPA Coordinator

ane Buten

From:

Allan.Zafft@modot.mo.gov

Sent:

Friday, July 11, 2008 10:16 AM

To:

Jerry Page

Subject:

Re: I-70 FTEIS MoDOT Job NO. J411486B

Dear Mr. Jerry Page:

In regards to your e-mail below, you indicate that Jackson County Public Works declines the invitation to become a participating agency for the I-70 First Tier Environmental Impact Statement (Job No. J4I1486B). Is your response for Jackson County or will MoDOT receive a response from the Jackson County - County Executive Office?

If you have questions, please contact me.

Sincerely,

Allan Zafft

Transportation Planning Coordinator

MoDOT - District 4 Phone: (816) 622-0687

E-mail: Allan.Zafft@modot.mo.gov

Jerry Page <JPage@jacksongov

.org>

То

07/10/2008 10:56

ΑM

Allan Zafft
<Allan.Zafft@modot.mo.gov>

CC

Subject

I-70 FTEIS MODOT Job NO. J411486B

Mr. Zafft, Jackson County Public Works declines the invitation to participate in the above subject.

Sincerely,

Jerry Page, PE Director Public Works Jackson County, MO 816.881.4496 phone 816.881.4448 fax jpage@jacksongov.org

From: Sent: Allan.Zafft@modot.mo.gov Friday, July 11, 2008 9:04 AM

To:

Judith Deel

Subject:

Re: I-70 Jackson County, Job No. J4I1486B

Ms. Judith Deel:

This e-mail is to let you know that I received your response on accepting the invitation to become a participating agency for the I-70 First Tier Environmental Impact Statement in Jackson County, Missouri. Thank you for your response.

Will you be attending the first agency coordination meeting and Study Area Tour that will be held on Wednesday, July 16, 2008 at 1:00 p.m. at the MoDOT District 4 Office, 600 NE Colbern Road, Lee's Summit, MO 64086? The coordination meeting is expected to last 1.5 hours and will be followed by a 1.5 hour tour of the Study Area. At the meeting, the Study Team will provide an overview of the study process and key issues. There will also be time for agencies to provide input on key concerns regarding the projects potential environmental or socioeconomic impacts.

If possible, could you please let me know by the end of July 14, if you plan on attending the July 16 meeting/tour? We are trying to get a headcount for this meeting. If you cannot attend the meeting, we will send you the meeting materials and notes soon after the meeting.

If you have questions, please contact me.

Sincerely,

Allan Zafft

Transportation Planning Coordinator

MoDOT - District 4 Phone: (816) 622-0687

E-mail: Allan.Zafft@modot.mo.gov

"Judith Deel" <judith.deel@dnr.

mo.gov>

07/07/2008 12:32

PM

Allan.Zafft@modot.mo.gov

CC

ΤО

Subject

I-70 Jackson County, Job No. J4I1486B

The Department of Natural Resources, State Historic Preservation Office, would like to become a participating agency for the MoDOT Job No. J4I1486B.

Judith Deel State Historic Preservation Office Missouri Department of Natural Resources P.O. Box 176 Jefferson City, MO 65102

From: Sent: Allan.Zafft@modot.mo.gov Monday, July 14, 2008 1:19 PM

To:

Nazar, Christopher R

Cc:

Matthew.Burcham@modot.mo.gov

Subject:

Fw: I-70 First Tier Environmental Impact Statement

FYI - Below is SEMA's acceptance to become a participating agency. SEMA representative will not attend the July 16 mtg.

Thanks,

Allan Zafft

Transportation Planning Coordinator

MoDOT - District 4 Phone: (816) 622-0687

E-mail: Allan.Zafft@modot.mo.gov

---- Forwarded by Allan S Zafft/D4/MODOT on 07/14/2008 01:17 PM ----

"Schneider,

Jason"

<Jason.Schneider@</pre>

To

sema.dps.mo.gov>

"Zafft, Allan"

cc

07/14/2008 09:28

MA

Subject

I-70 First Tier Environmental

<allan.zafft@modot.mo.gov>

Impact Statement

Mr. Zafft

The State Emergency Management Agency (SEMA) will accept the invitation to become a participating agency. We will be unable however to attend the meeting on Wednesday July 16, 2008.

Jason Schneider

Floodplain Management Engineer

Missouri State Emergency Management Agency

Phone: 573.526.9119 Fax 573.526.9198

jason.schneider@sema.dps.mo.gov

From:

Allan.Zafft@modot.mo.gov

Sent:

Monday, July 14, 2008 1:18 PM

To:

Nazar, Christopher R

Cc:

Matthew.Burcham@modot.mo.gov

Subject:

Fw: I-70 First Tier EIS, Jackson County, MoDOT Job No. J4I1486B - Request to Become a

Participating Agency

FYI - Below is Independence's acceptance to become a participating agency. John Powell will be attending the July 16 meeting/tour.

Thanks,

Allan Zafft

Transportation Planning Coordinator

MoDOT - District 4 Phone: (816) 622-0687

E-mail: Allan.Zafft@modot.mo.gov

---- Forwarded by Allan S Zafft/D4/MODOT on 07/14/2008 01:13 PM ----

"John Powell" <JPOWELL@indepmo.</pre>

orq>

То <Allan.Zafft@modot.mo.gov>

07/14/2008 10:39

"John Pinch" <JPinch@indepmo.org>

Subject

Re: I-70 First Tier EIS, Jackson County, MoDOT Job No. J4I1486B -Request to Become a Participating

Agency

Hello Allan, Independence is accepting the invitation to become a participating agency for the I-70 project. I will be attending the July 16 meeting and tour. Thank you for the opportunity to be involved with this important project.

John Powell Public Works Director (816) 325-7606

>>> <Allan.Zafft@modot.mo.gov> 7/11/2008 12:56 PM >>>

Dear Mr. Robert Heacock:

Attached is a letter dated June 26, 2008 from David B. Nichols, Missouri Department of Transportation (MoDOT) Director of Program Delivery, to you that extends an invitation to the city of Independence to become a participating agency for the I-70 First Tier Environmental Impact Statement in Jackson County (see attachment for more details).

(See attached file: Invitation I-70 FTEIS Robert Heacock.pdf)

This e-mail is a reminder that the deadline to accept or decline the invitation to become

a participating agency is no later than Tuesday, July 15, 2008.

In addition, the first agency coordination meeting will be held on Wednesday, July 16, 2008 at 1:00 p.m. at the MoDOT District 4 Office, 600 NE Colbern Road, Lee's Summit, MO 64086. The coordination meeting is expected to last 1.5 hours and will be followed by a 1.5 hour tour of the Study Area. At the meeting, the Study Team will provide an overview of the study process and key issues. There will also be time for agencies to provide input on key concerns regarding the projects potential environmental or socioeconomic impacts. Could you please let me know, if a city representative will attend the July 16 meeting/tour?

If you have questions, please contact me.

Sincerely,

Allan Zafft
Transportation Planning Coordinator
MoDOT - District 4
Phone: (816) 622-0687
E-mail: Allan.Zafft@modot.mo.gov

From:

Allan.Zafft@modot.mo.gov

Sent:

Monday, July 14, 2008 9:13 PM

To:

Nazar, Christopher R

Cc:

Matthew.Burcham@modot.mo.gov

Subject:

Fw: MoDOT Job No. J4I1486B

FYI - Todd Gemeinhardt will represent MDC at the July 16 meeting/tour. Shannon Cave will be the point of contact for MDC on the I-70 FTEIS.

Thanks,

Allan Zafft

Transportation Planning Coordinator

MoDOT - District 4

Phone: (816) 622-0687

E-mail: Allan.Zafft@modot.mo.gov

---- Forwarded by Allan S Zafft/D4/MODOT on 07/14/2008 09:09 PM ----

"Shannon Cave" <Shannon.Cave@mdc

.mo.gov>

.

<Allan.Zafft@modot.mo.gov>

То

07/14/2008 02:24

PM

"Jane Epperson"

<Jane.Epperson@mdc.mo.gov>, "Joseph

Bonneau"

<Joseph.Bonneau@mdc.mo.gov>, "Mark
Nelson" <Mark.Nelson@mdc.mo.gov>,

"Todd Gemeinhardt"

<Todd.Gemeinhardt@mdc.mo.gov>

Subject

Re: MoDOT Job No. J4I1486B

Per your request, Todd Gemeinhardt of MDC's Fisheries Division will represent MDC at the initial meeting. Please keep me involved with minutes and future meeting announcements, as I will be the point of contact for MDC's administration on this matter.

Mr. Shannon D. Cave
Public Involvement Coordinator
Policy Coordination Unit
Missouri Department of Conservation
P. O. Box 180
Jefferson City, MO 65102
573-522-4115 X 3250
e-mail: Shannon.Cave@mdc.mo.gov

>>> <Allan.Zafft@modot.mo.gov> 7/11/2008 9:25 AM >>>
Ms. Jane Epperson:

This e-mail is to let you know that I received your response on accepting the invitation

to become a participating agency for the I-70 First Tier Environmental Impact Statement in Jackson County, Missouri. Thank you for responding.

Will there be a Department of Conservation representative attending the first agency coordination meeting and Study Area Tour that will be held on Wednesday, July 16, 2008 at 1:00 p.m. at the MoDOT District 4 Office, 600 NE Colbern Road, Lee's Summit, MO 64086? The coordination meeting is expected to last 1.5 hours and will be followed by a 1.5 hour tour of the Study Area. At the meeting, the Study Team will provide an overview of the study process and key issues. There will also be time for agencies to provide input on key concerns regarding the projects potential environmental or socioeconomic impacts.

If possible, could you please let me know by the end of July 14, if a Department of Conservation representative plans on attending the July

meeting/tour? We are trying to get a headcount for this meeting. If a Department of Conservation representative cannot attend the meeting, we will send you and Mr. Shannon Cave the meeting materials and notes to review soon after the meeting.

If you have questions, please contact me.

Sincerely,

Allan Zafft
Transportation Planning Coordinator
MoDOT - District 4

Phone: (816) 622-0687

E-mail: Allan.Zafft@modot.mo.gov

"Jane Epperson"

<Jane.Epperson@md</pre>

c.mo.gov>

Τo

inet:Allan.Zafft@modot.mo.gov

07/09/2008 11:11

CC

AΜ

"John Hoskins"

<John.Hoskins@mdc.mo.gov>, "Mark

Nelson"

<Mark.Nelson@mdc.mo.gov>,

"Shannon Cave"

<Shannon.Cave@mdc.mo.gov>

Subject

MoDOT Job No. J4I1486B

Good morning Allan,

I'm contacting you in response to Mr. David Nichols' June 26, 2008 letter to Missouri Department of Conservation's Director John Hoskins, in which we were invited to participate in the I-70 First Tier EIS preparation.

Department accepts your invitation and looks forward to contributing information and comments to conserve the fish, forest, and wildlife resources of the state. The staff position who provides environmental coordination for this part of the state is vacant at the moment, so please add Mr. Shannon Cave's name to the contact list (Shannon is copied on this e-mail).

Thanks and have a great day!

Jane Epperson
Policy Coordination Unit Supervisor
Missouri Department of Conservation
573-522-4115 ext 3351
jane.epperson@mdc.mo.gov
fax 573-526-4495

"There are risks and costs to a program of action, but they are far less than the long-range risks and costs of comfortable inaction." JFK

From:

Allan.Zafft@modot.mo.gov Friday, July 11, 2008 9:17 AM

Sent:

Cheryl Floyd

Cc:

Mark Huffer

Subject:

Re: KCATA RESPONSE: I-70 First Tier Environmental Impact Statement

Attachments:

pic16096.jpg



pic16096.jpg (12 KB)

Ms. Cheryl D. Floyd:

This e-mail is to let you know that I received KCATA's response on accepting the invitation to become a participating agency for the I-70 First Tier Environmental Impact Statement in Jackson County, Missouri. Thank you for responding.

Will there be a KCATA representative attending the first agency coordination meeting and Study Area Tour that will be held on Wednesday, July 16, 2008 at 1:00 p.m. at the MoDOT District 4 Office, 600 NE Colbern Road, Lee's Summit, MO 64086? The coordination meeting is expected to last 1.5 hours and will be followed by a 1.5 hour tour of the Study Area. At the meeting, the Study Team will provide an overview of the study process and key issues. There will also be time for agencies to provide input on key concerns regarding the projects potential environmental or socioeconomic impacts.

If possible, could you please let me know by the end of July 14, if a KCATA representative plans on attending the July 16 meeting/tour? We are trying to get a headcount for this meeting. If a KCATA representative cannot attend the meeting, we will send Mr. Mark Huffer the meeting materials and notes to review soon after the meeting.

If you have questions, please contact me.

Sincerely,

Allan Zafft
Transportation Planning Coordinator
MoDOT - District 4
Phone: (816) 622-0687
E-mail: Allan.Zafft@modot.mo.gov

"Cheryl Floyd"
<cfloyd@kcata.org
>

07/01/2008 01:13 PM <allan.zafft@modot.mo.gov>

CC

То

"Mark Huffer" <mhuffer@kcata.org>
Subject

KCATA RESPONSE: I-70 First Tier Environmental Impact Statement (Embedded image moved to file: pic16096.jpg) Dear Mr. Zafft,

This message is sent to you on behalf of Mark Huffer, our General Manager.

Mr. Huffer received the letter from David B. Nichols, dated June 26, 2008, inviting the KCATA to become a participating agency in the I-70 First Tier Environmental Impact Statement process. Mr. Huffer confirms that KCATA will participate.

Thank you!

Cheryl D. Floyd

Executive Assistant to the General Manager Assistant Secretary to the Board of Commissioners Kansas City Area Transportation Authority 1200 E. 18th Street Kansas City, MO 64108

P: 816-346-0211 F: 816-346-0253

E: cfloyd@kcata.org

From:

Allan.Zafft@modot.mo.gov

Sent: To:

Friday, July 11, 2008 9:07 AM Kacirek, David - St Joseph, MO

Cc:

Lee, Clayton - Columbia, MO

Subject:

RE: I-70 First Tier Environmental Impact Statement

Mr. David Kacirek:

Thanks you for the quick response. Yes, I will send you the meeting material and notes for your review soon after the meeting.

Thanks,

Allan Zafft

Transportation Planning Coordinator

MoDOT - District 4 Phone: (816) 622-0687

E-mail: Allan.Zafft@modot.mo.gov

"Kacirek, David -St Joseph, MO" <David.Kacirek@mo

To

.usda.gov>

07/11/2008 09:03 AM

<Allan.Zafft@modot.mo.gov>

CC

"Lee, Clayton - Columbia, MO" <clayton.lee@mo.usda.gov>

Subject

RE: I-70 First Tier Environmental

Impact Statement

Mr. Allan Zafft,

Thank you for the invitation to attend the meeting and Study Area Tour. I will be at a soils training session in Wisconsin the week of July 13-18; and will not be able to attend the coordination meeting on July Please send me the materials and notes for me to review at a later date. Thank you.

Dave Kacirek Area Resource Soil Scientist NRCS St. Joseph, MO.

----Original Message----

From: Allan.Zafft@modot.mo.gov [mailto:Allan.Zafft@modot.mo.gov]

Sent: Friday, July 11, 2008 8:54 AM To: Lee, Clayton - Columbia, MO Cc: Kacirek, David - St Joseph, MO

Subject: Re: I-70 First Tier Environmental Impact Statement

Mr. Clayton Lee:

This e-mail is to let you know that I received your response on accepting the invitation to become a participating agency for the I-70 First Tier Environmental Impact Statement in Jackson County, Missouri. Thank you for your response.

Will Mr. Kacirek be attending the first agency coordination meeting and Study Area Tour that will be held on Wednesday, July 16, 2008 at 1:00 p.m. at the MoDOT District 4 Office, 600 NE Colbern Road, Lee's Summit, MO 64086? The coordination meeting is expected to last 1.5 hours and will be followed by a 1.5 hour tour of the Study Area. At the meeting, the Study Team will provide an overview of the study process and key issues.

There

will also be time for agencies to provide input on key concerns regarding the projects potential environmental or socioeconomic impacts.

If possible, could you please let me know by the end of July 14, if Mr. Kacirek is attending the July 16 meeting/tour? We are trying to get a headcount for this meeting. If Mr. Kacirek cannot attend the meeting, we will send the meeting materials and notes.

If you have questions, please contact me.

Sincerely,

Allan Zafft Transportation Planning Coordinator MoDOT - District 4 Phone: (816) 622-0687

E-mail: Allan.Zafft@modot.mo.gov

"Lee, Clayton -

Columbia, MO"

<clayton.lee@mo.u

То

sda.gov>

<Allan.Zafft@modot.mo.gov>

CC

07/02/2008 11:36

"Kacirek, David - St Joseph, MO"

AΜ

<David.Kacirek@mo.usda.gov>

Subject

I-70 First Tier Environmental

Impact Statement

Allan.

NRCS would be happy to be a participating agency with this project.

Based

on a quick review of the map, it appears the project area is entirely within the city limits making the provisions of the Farmland Protection Policy Act a non-issue. Areas within city limits are considered already converted. With regard to water, soil, and plant resources, we are always willing of offer recommendations. Oftentimes the use of our critical area seeding practice standard will help with highly erodible soils.

David Kacirek, Area Resource Soil Scientist in St. Joseph, MO has responsibilities within this area and can serve the NRCS contact. I will mail him the information you sent to Roger Hansen, so he will have the background information.

If you have any questions, let me know.
Thanks!
Clayton Lee
State Soil Scientist
USDA-NRCS
[attachment "David Kacirek (david.kacirek@mo.usda.gov).vcf" deleted by Allan S
Zafft/D4/MODOT]

From: Sent: Allan.Zafft@modot.mo.gov Friday, July 11, 2008 8:54 AM

To:

Lee, Clayton - Columbia, MO Kacirek, David - St Joseph, MO

Cc: Subject:

Re: I-70 First Tier Environmental Impact Statement

Mr. Clayton Lee:

This e-mail is to let you know that I received your response on accepting the invitation to become a participating agency for the I-70 First Tier Environmental Impact Statement in Jackson County, Missouri. Thank you for your response.

Will Mr. Kacirek be attending the first agency coordination meeting and Study Area Tour that will be held on Wednesday, July 16, 2008 at 1:00 p.m. at the MoDOT District 4 Office, 600 NE Colbern Road, Lee's Summit, MO 64086? The coordination meeting is expected to last 1.5 hours and will be followed by a 1.5 hour tour of the Study Area. At the meeting, the Study Team will provide an overview of the study process and key issues. There will also be time for agencies to provide input on key concerns regarding the projects potential environmental or socioeconomic impacts.

If possible, could you please let me know by the end of July 14, if Mr. Kacirek is attending the July 16 meeting/tour? We are trying to get a headcount for this meeting. If Mr. Kacirek cannot attend the meeting, we will send the meeting materials and notes.

If you have questions, please contact me.

Sincerely,

Allan Zafft
Transportation Planning Coordinator
MoDOT - District 4
Phone: (816) 622-0687
E-mail: Allan.Zafft@modot.mo.gov

"Lee, Clayton -Columbia, MO" <clayton.lee@mo.u sda.gov>

07/02/2008 11:36 AM <Allan.Zafft@modot.mo.gov>

CC

Tο

"Kacirek, David - St Joseph, MO" <David.Kacirek@mo.usda.gov>

Subject

I-70 First Tier Environmental Impact Statement

Allan, NRCS would be happy to be a participating agency with this project. Based on a quick review of the map, it appears the project area is entirely within the city limits making the provisions of the Farmland Protection Policy Act a non-issue. Areas within city limits are considered already converted. With regard to water, soil, and plant resources, we are always willing of offer recommendations. Oftentimes the use of our critical area seeding practice standard will help with highly erodible soils.

David Kacirek, Area Resource Soil Scientist in St. Joseph, MO has responsibilities within this area and can serve the NRCS contact. I will mail him the information you sent to Roger Hansen, so he will have the background information.

If you have any questions, let me know. Thanks!
Clayton Lee
State Soil Scientist
USDA-NRCS

"Hibbs, David R NWK" <David.R.Hibbs@usace.army.mil>

To <Allan.Zafft@modot.mo.gov> 08/15/2008 03:27 PM

cc "Berka, Douglas R NWK"
<Douglas.R.Berka@usace.army.mil>,
"Holm, John D NWK"
<John.D.Holm@usace.army.mil>,
"Frazier, Mark D NWK"
<Mark.D.Frazier@usace.army.mil>

Subject RE: Project No. 2008-01254, I-70 First Tier Environmental Impact Statement in Jackson County

Mr. Zafft,

This is in response to your email below, requesting our review of the Environmental Impact Assessment Methodologies Coordination Memorandum (Draft Version) and Public Involvement and Agency Coordination Plan (Draft Version) for the proposed Interstate 70 improvement project in the Kansas City, Missouri metro area.

The project corridor as outlined in the documents is of interest to us because of our regulatory authority under the Clean Water Act (33 U.S.C. 1344) and because of our Blue River Channel Modification Project, a cooperative effort with the City of Kansas City, Missouri.

We have no specific comments on these draft documents at this time. General comments are to mention that should the proposed improvements require the discharge of dredged or fill material in any waters of the United States, including wetlands, a Department of the Army (DA) permit will be required.

Also, any potential impacts upon the Blue River Channel Modification Project will also need to be coordinated with the Corps and the City of Kansas City, Missouri.

If you have any questions concerning this matter, please feel free to contact Doug Berka at 816-389-3657. Please reference Permit No. 2008-01254 in all comments and/or inquiries relating to this project.

Thanks.

David R. Hibbs

Regulatory Program Manager/Assistant Branch Chief Kansas City District, U.S. Army Corps of Engineers 700 Federal Bldg., 601 East 12th Street (OD-R) Kansas City, MO 64106 Phone - 816-389-3136 david.r.hibbs@usace.army.mil

City of Independence

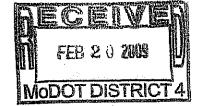
111 EAST MAPLE • P.O. BOX 1019 • INDEPENDENCE, MISSOURI 64051-0519



www.ci.independence.mo.us • (816) 325-7000

February 13, 2009

Missouri Department of Transportation Attention: Elizabeth Wright, District Engineer 600 N.E. Colbern Road Lee's Summit, MO 64086



RE: 1-70 FIRST TIER ENVIRONMENTAL IMPACT STUDY

Dear Ms. Wright:

Thank you for the opportunity to participate with your efforts on the I-70 First Tier Environmental Impact Study. This project has the potential of becoming a great benefit to Independence and the metropolitan area. The recent evaluation of the initial strategies has been reviewed and the following comments are being offered.

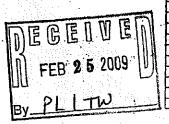
- The two strategies of no-build and fixing key bottlenecks are not adequate to address the long term needs of the area. A component to increase the capacity and reduce travel delays is necessary.
- The idea of a transportation improvement corridor between downtown and U.S.
 40 Highway needs to be further defined. It currently states that this could be high occupancy vehicle lanes, reversible lanes, toll lanes, or bus only lanes. These all will have different levels of capacity improvements.
- A cost-benefit analysis is needed between the adding general lane capacity and the transportation improvement corridor is needed. The general lane capacity option is favored unless there are clear advantages to the transportation improvement corridor.
- The component of fixing key bottlenecks needs to include reconstruction of the I-70 and I-470 interchange. This will need to include improvements to the adjacent I-470 interchanges with U.S. 40 Highway and 39th Street.

Please review these comments and advise if there are any questions or further information needed. We will look forward to participating in the future steps of this study with you.

Sincerely,

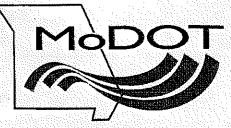
John Powell, P.E.
Public Works Director

cc: Donna Coatsworth



T^{n}	Dist. Engr.	Regi. Councel	
,	Asst. DE-Oper	General Services	
Z	Assi. DE-Design	Human Resources	
_	Assi. DE-Admin	Maintenance	
	All Dept.	Materials	
	Area Engineers	Planning	
	Bus, and Benefits	Project Managers	
	Design Build	Community Relations	
	Construction	Risk Mgt.	
	Customer Service	Right of Way	
	Design	Traffic	
	Info Systems	Scout	

Missouri Department of Transportation



Elizabeth A. Wright, District Engineer

District 4 - Kansas City Area 600 NE Colbern Road Lee's Summit, MO 64086 (816) 622-6500 Fax (816) 622-6323 Toll free 1-888 ASK MoDOT (1-888-ASK-6636) www.modot.mo.gov

April 7, 2009

Mr. John Powell, P.E.
Public Works Director
City of Independence
111 East Maple, P.O. Box 1019
Independence, MO 64051-0519

Dear Mr. Powell:

Thank you for providing us review comments on the Draft Initial Strategy Packages Summary Memorandum for the I-70 First Tier Environmental Impact Statement (FTEIS) in the Kansas City, Missouri metro area.

Below are our responses to the comments as shown in your letter dated February 13, 2009.

Comment Bullet #1 — The two strategies of no-build and fixing key bottlenecks are not adequate to address the long term needs of the area. A component to increase the capacity and reduce travel delays is necessary.

Response #1 – The purpose of the I-70 FTEIS is determining an improvement strategy to address the key purpose and need goals for the corridor. The Study Team is assessing the potential for all four reasonable strategies to meet the goals of the study (improve safety, reduce congestion, improve accessibility, restore and maintain existing infrastructure, and improve goods movement) in 2030. A No-Build strategy is required to be carried forward per the National Environmental Policy Act (NEPA) process and serves as a comparative strategy.

Comment Bullet #2 — The idea of a transportation improvement corridor between downtown and U.S. 40 Highway needs to be further defined. It currently states that this could be high occupancy vehicle lanes, reversible lanes, toll lanes, or bus only lanes. These all will have different levels of capacity improvements.

Response #2 — This strategy was intentionally left with a variety of options per the original I-70 Major Investment Study. The FTEIS evaluation process of the transportation improvement corridor will start with the widest footprint of all the potential uses within the corridor. As potential uses are eliminated, the footprint can be narrowed. It is easier to narrow the footprint and reduce the impacts as opposed to increasing the footprint and impact area as the study moves

Mr. John Powell Page 2 April 7, 2009

forward. If the Transportation Improvement Corridor is selected as the preferred strategy, the I-70 FTEIS may limit the options available for the corridor as needed for a First Tier environmental clearance, which will allow decisions on the corridor to be made as part of the second tier studies.

<u>Comment Bullet #3</u> – A cost-benefit analysis is needed between the adding general lane capacity and the transportation improvement corridor is needed. The general lane capacity option is favored unless there are clear advantages to the transportation improvement corridor.

Response #3 — With limited funding sources, MoDOT is very conscience to achieve cost effective improvements. In deciding on a preferred strategy, the costs, benefits, and impacts will all be evaluated. The city of Independence's preference for general lane capacity is noted.

<u>Comment Bullet #4</u> – The component of fixing key bottlenecks needs to include reconstruction of the I-70 and I-470 interchange. This will need to include improvements to the adjacent I-470 interchanges with U.S. 40 Highway and 39th Street.

Response #4 – The fix key bottlenecks strategy does include improvements at the I-70 and I-470 interchange. This interchange is identified as a bottleneck, however an improvement approach has not been decided upon yet. The approach may include a reconstruction of the interchange. MoDOT recognizes the proximity of the U.S. 40 Highway and the 39th Street interchanges will require special considerations to any improvement options at the I-70 and I-470 interchange. One result of the FTEIS is to identify sections of independent utility (SIU). Due to the complexity of the I-70 and I-470 interchange and nearby interchanges, the initial thought is to have the I-70 and I-470 interchange along with the U.S. 40 and 39th Street interchanges as a SIU for further Tier 2 study. In order to accomplish this, the I-70 FTEIS will expand its study boundaries to include greater portions of I-470. The necessary data is available through the I-470 Purpose and Need Study if the portion of the study area added to the I-70 FTEIS remains within the I-470 Purpose and Need study area.

We appreciate your continued coordination as a participation agency on this environmental study. If you have questions, please contact Allan Zafft at (816) 622-0687.

Sincerely,

Elizabeth A. Wright, P.E.

Elmated and

Copies: Ms. Donna Coatsworth-City of Independence

Mr. Matt Burcham-de Ms. Lee Ann Kell-4tp Mr. Allan Zafft-4tp



Jeremiah W. (Jay) Nixon, Governor • Joseph P. Bindbeutel, Acting Director

DEPARTMENT OF NATURAL RESOURCES

www.dnr.mo.gov

February 6, 2009

Mr. Allan Zafft
Transportation Planning Coordinator
MoDOT - District 4
600 NE Colbern Road
Lee's Summit, MO 64086

Re: Draft Initial Strategy Packages Summary Memorandum for the I-70 First Tier Environmental Impact Statement (FTEIS), Kansas City, Missouri

Dear Mr. Zafft:

The Missouri Department of Natural Resources (Department) appreciates the opportunity to provide comments on the Draft Initial Strategy Packages Summary Memorandum for the I-70 First Tier Environmental Impact Statement (FTEIS), in Kansas City, Missouri.

As a first tier study, this project is in the initial stages of identifying alternatives strategies for reducing congestion on Interstate 70 through Kansas City, Missouri. The Department remains interested in following this study as it develops. However, since no environmental impacts have yet been identified in the study, the Department has no comments at this time.

We appreciate the opportunity to provide comments on the Draft Initial Strategy Packages Summary Memorandum for the I-70 First Tier Environmental Impact Statement (FTEIS), in Kansas City, Missouri. If you have any questions or need clarification, please contact me or Ms. Jane Beetem, phone number 573-751-3195. Her address for correspondence is Department of Natural Resources, P.O. Box 176, Jefferson City, MO 65102. Thank you.

Sincerely,

DEPARTMENT OF NATURAL RESOURCES

Dru Buntin

Director of Government Affairs

su Sudir

DB:ibi

From: Allan.Zafft@modot.mo.gov

Sent: Wednesday, February 25, 2009 1:00 PM

To: Nazar, Christopher R

Cc: Matthew.Burcham@modot.mo.gov

Subject: Fw: 1-70 First Tier EIS, Kansas to I-470, MoDOT Job No. J4I1486B,

Attachments: City of Independence_response.pdf; DNR response.pdf





City of DNR response.pdf ependence_respons (49 KB)

Chris:

We received responses from three participating agencies regarding the Draft Initial Strategy Packages Summary Memorandum. Attached are letters from the city of Independence and the Department of Natural Resources. Below is an e-mail response from the Missouri Department of Conversation. I e-mailed KCATA and KMCO that I need their comments by Thursday, February 26, 2009.

(See attached file: City of Independence_response.pdf) (See attached file: DNR response.pdf)

I need to talk with Matt Burcham about the MoDOT protocol on responding to participating agency comments (i.e. city of Independence).

If you have questions, please contact me.

Thanks,

Allan Zafft
Transportation Planning Coordinator
MoDOT - District 4
Phone: (816) 622-0687
E-mail: Allan.Zafft@modot.mo.gov

---- Forwarded by Allan S Zafft/D4/MODOT on 02/25/2009 12:40 PM -----

Shannon Cave <Shannon.Cave@mdc</pre>
.mo.gov>

"Allan.Zafft@modot.mo.gov"

01/21/2009 02:14 <Allan.Zafft@modot.mo.gov>

Todd Gemeinhardt

<Todd.Gemeinhardt@mdc.mo.gov>

Subject RE: I-70 First Tier EIS, Kansas to I-470, MoDOT Job No. J4I1486B,

To

It looks like a good deal has been accomplished to narrow the range of build options. MDC concerns primarily relate to issues further down the planning pipeline, primarily best

management of stream crossings and construction runoff/pollutants. Those issues are pretty neutral on the subject of how many lanes and which vehicle travels which lane.

At this time we are satisfied with the drafts and have no comments to offer.

Shannon Cave Public Involvement Coordinator Missouri Department of Conservation P. O. Box 180 Jefferson City, MO 65102-0180 573-522-4115 ext. 3250 Shannon.Cave@mdc.mo.gov

----Original Message----

From: Allan.Zafft@modot.mo.gov [mailto:Allan.Zafft@modot.mo.gov]

Sent: Thursday, January 15, 2009 5:31 PM

To: cothern.joe@epa.gov; Smith.StephenK@epamail.epa.gov; Tucker.Amber@epamail.epa.gov; Shannon Cave; Todd Gemeinhardt; judith.deel@dnr.mo.gov; jane.beetem@dnr.mo.gov; David.Kacirek@mo.usda.gov; Jason.Schneider@sema.dps.mo.gov; RONA@MARC.ORG; mhuffer@kcata.org; djarrold@kcata.org; doconnor@kcata.org; jpowell@indepmo.org; dcoatsworth@indepmo.org; TGarland@indepmo.org; Patty Hilderbrand@kcmo.org; David Park@kcmo.org; Tom Degenhardt@kcmo.org Cc: peqqy.casey@fhwa.dot.gov; Matthew.Burcham@modot.mo.gov; Nazar, Christopher R Subject: MoDOT Job No. J4I1486B, I-70 First Tier EIS, Draft Initial Strategy Packages Summary Memorandum

Dear Participating Agencies:

The Missouri Department of Transportation (MoDOT) has completed the Draft Initial Strategy Packages Summary Memorandum for the I-70 First Tier Environmental Impact Statement (FTEIS) in the Kansas City, Missouri metro area. This project spans 18 miles of I-70 from the last ramp termini east of the Missouri - Kansas state line to just east of I-470 and includes all of the Kansas City, Missouri Downtown Freeway Loop.

As indicated in the I-70 FTEIS Public Involvement and Agency Coordination Plan (July 2008), participating agencies are afforded the opportunity to review the first tier strategies for the I-70 FTEIS. Therefore, MoDOT is requesting your review on the Draft Initial Strategy Packages Summary Memorandum. This document discusses the fifteen initial first tier strategy packages that were evaluated and screened down to four reasonable first strategy packages. Currently, MoDOT is holding an online public meeting from January 2 to 31, 2009 where you can review a detailed map of the proposed four reasonable first strategies. The online meeting is posted on the project website at www.modot.org/kansascity/metroi70 and it allows the general public to make comments via blog or e-mail about the reasonable first tier strategies.

Below is the MoDOT ftp website address to download the Draft Initial Strategy Packages Summary Memorandum. If you experience any problems with downloading the document, please let me know and I can mail you a CD copy or hard copy ASAP.

ftp://ftp.modot.mo.gov/District4/I-70%20FTEIS/

Please e-mail me your review comments of the Draft Initial Strategy Packages Summary Memorandum by Monday, February 16, 2009. Note: This is a draft document. Please do not circulate the Draft Initial Strategy Packages Summary Memorandum to the general public at this time.

Also, available at the MoDOT ftp website is the following document: November 3, 2008 Resource Agency Group Meeting Minutes and Meeting Handouts July 16, 2008 Resource Agency Group Meeting Minutes and Study Area Tour Notes Draft Purpose and Need Technical Memorandum (Most Recent Version) Draft Purpose and Need Technical Memorandum - Appendix (Most Recent

Version)
Draft Environmental Impact Assessment Methodologies Coordination
Memorandum (Most Recent Version)
Draft Public Involvement and Agency Coordination Plan (Most Recent Version)

If you have questions, please contact me.

Sincerely,

Allan Zafft Transportation Planning Coordinator MoDOT - District 4 Phone: (816) 622-0687

E-mail: Allan.Zafft@modot.mo.gov

U.S. Department of Transportation Federal Highway

Missouri Division

Allen Masuda, Division Administrator

3220 W. Edgewood, Suite H Jefferson City, Missouri 65109 (573) 636-7104 Fax (573) 636-9283 Missouri.FHWA@fhwa.dot.gov

Administration

August 22, 2008

Mr. Leaford Bearskin, Chief Wyandotte Nation 64790 East Highway 60 Wyandotte, OK 74370

Attn: Ms. Kathleen A. Welch, 106

Subject:

I-70, Jackson County, Missouri

I-70 First Tier Environmental Impact Statement

MoDOT Job No. J4I1486B

Invitation to Become a Consulting Party for Section 106 Issues

Dear Chief Bearskin:

The Federal Highway Administration (FHWA) in cooperation with the Missouri Department of Transportation (MoDOT) is initiating a First Tier Environmental Impact Statement (FTEIS) to consider impacts of improvements to I-70 from the Missouri/Kansas state line to I-470 in Jackson County, Missouri. The project will include the entire downtown Kansas City central business district (CBD) freeway loop. The project length is approximately 20 miles, including all segments of the downtown Kansas City CBD freeway loop. A copy of the project location map is enclosed.

FHWA and MoDOT will prepare an FTEIS to develop an improvement strategy for this I-70 corridor. We are now working on a purpose and need statement for the project and will next consider strategies to improve I-70 including widening and interchange improvements, as well as strategies to improve system management and operations. We expect to have a preliminary draft of the FTEIS in spring of 2009.

As a tribal government you are entitled to become a consulting party under Section 106 of the National Historic Preservation Act of 1966. As a consulting party you would have the right to participate in identification of properties of interest to the tribe and/or that are eligible for the National Register of Historic Places and the evaluation of effects on those properties that are eligible.

We would appreciate it if you would let us know if you have any information you would like to provide or concerns you may have about this project or this project area. Your response will help us to incorporate your concerns into project planning. For your convenience we have



enclosed a Project Consultation Options form that you may choose to complete and forward to our office, hopefully within 30 days.

If you have questions or would like to discuss in more detail the project or our respective roles and responsibilities during preparation of the FTEIS, please contact Mr. Allan Zafft, MoDOT District 4 Transportation Planning Coordinator, at 816-622-0687; or me at 573-638-2620 or peggy.casey@fhwa.dot.gov.

Sincerely,

//original signature//

Peggy J. Casey, P.E. Environmental Projects Engineer

Enclosures

Copies: MoDOT, Environmental Section, Gayle Unruh

HNTB, Tim Flagler



U.S.Department of Transportation

Missouri Division

Allen Masuda, Division Administrator

3220 W. Edgewood, Suite H Jefferson City, Missouri 65109 (573) 636-7104 Fax (573) 636-9283 Missouri.FHWA@fhwa.dot.gov

Federal Highway Administration

August 22, 2008

Ms. Kay Rhoads, Principal Chief Sac and Fox Nation of Oklahoma Route 2, Box 246 Stroud, OK 74079

Attn: Ms. Sandra Kaye Massey, Cultural Resources

Subject:

I-70, Jackson County, Missouri

I-70 First Tier Environmental Impact Statement

MoDOT Job No. J4I1486B

Invitation to Become a Consulting Party for Section 106 Issues

Dear Chief Rhoads:

The Federal Highway Administration (FHWA) in cooperation with the Missouri Department of Transportation (MoDOT) is initiating a First Tier Environmental Impact Statement (FTEIS) to consider impacts of improvements to I-70 from the Missouri/Kansas state line to I-470 in Jackson County, Missouri. The project will include the entire downtown Kansas City central business district (CBD) freeway loop. The project length is approximately 20 miles, including all segments of the downtown Kansas City CBD freeway loop. A copy of the project location map is enclosed.

FHWA and MoDOT will prepare an FTEIS to develop an improvement strategy for this I-70 corridor. We are now working on a purpose and need statement for the project and will next consider strategies to improve I-70 including widening and interchange improvements, as well as strategies to improve system management and operations. We expect to have a preliminary draft of the FTEIS in spring of 2009.

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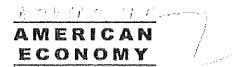
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Peggy J. Casey, P.E. Environmental Projects Engineer

Enclosures

Copies: MoDOT, Environmental Section, Gayle Unruh

HNTB, Tim Flagler



U.S. Department of Transportation

Missouri Division

Allen Masuda, Division Administrator

3220 W. Edgewood, Suite H Jefferson City, Missouri 65109 (573) 636-7104 Fax (573) 636-9283 Missouri.FHWA@fhwa.dot.gov

Federal Highway Administration

August 22, 2008

Mr. Leon Campbell, Chairman Iowa Tribe of Kansas and Nebraska 3345B Thrasher Road White Cloud, Kansas 66094

Attn: Mr. Patt Murphy, NAGPRA Representative

206 South Buckeye Avenue

Abilene, KS 67410

Subject:

I-70, Jackson County, Missouri

I-70 First Tier Environmental Impact Statement

MoDOT Job No. J4I1486B

Invitation to Become a Consulting Party for Section 106 Issues

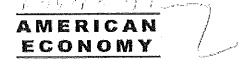
Dear Chairman Campbell:

The Federal Highway Administration (FHWA) in cooperation with the Missouri Department of Transportation (MoDOT) is initiating a First Tier Environmental Impact Statement (FTEIS) to consider impacts of improvements to I-70 from the Missouri/Kansas state line to I-470 in Jackson County, Missouri. The project will include the entire downtown Kansas City central business district (CBD) freeway loop. The project length is approximately 20 miles, including all segments of the downtown Kansas City CBD freeway loop. A copy of the project location map is enclosed.

FHWA and MoDOT will prepare an FTEIS to develop an improvement strategy for this I-70 corridor. We are now working on a purpose and need statement for the project and will next consider strategies to improve I-70 including widening and interchange improvements, as well as strategies to improve system management and operations. We expect to have a preliminary draft of the FTEIS in spring of 2009.

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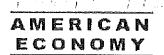
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Peggy J. Casey, P.E. Environmental Projects Engineer

Enclosures

Copies: MoDOT, Environmental Section, Gayle Unruh

HNTB, Tim Flagler



Missouri Division



Administration

Allen Masuda, Division Administrator

3220 W. Edgewood, Suite H Jefferson City, Missouri 65109 (573) 636-7104 Fax (573) 636-9283 Missouri.FHWA@fhwa.dot.gov

August 22, 2008

Mr. Homer Bear, Jr., Chairman Sac and Fox Tribe of the Mississippi in Iowa 349 Meskwaki Road Tama, IA 52339

Attn: Mr. Johnathan Buffalo, Historic Preservation Coordinator

Subject:

I-70, Jackson County, Missouri

I-70 First Tier Environmental Impact Statement

MoDOT Job No. J4II486B

Invitation to Become a Consulting Party for Section 106 Issues

Dear Chairman Bear:

The Federal Highway Administration (FHWA) in cooperation with the Missouri Department of Transportation (MoDOT) is initiating a First Tier Environmental Impact Statement (FTEIS) to consider impacts of improvements to I-70 from the Missouri/Kansas state line to I-470 in Jackson County, Missouri. The project will include the entire downtown Kansas City central business district (CBD) freeway loop. The project length is approximately 20 miles, including all segments of the downtown Kansas City CBD freeway loop. A copy of the project location map is enclosed.

FHWA and MoDOT will prepare an FTEIS to develop an improvement strategy for this I-70 corridor. We are now working on a purpose and need statement for the project and will next consider strategies to improve I-70 including widening and interchange improvements, as well as strategies to improve system management and operations. We expect to have a preliminary draft of the FTEIS in spring of 2009.

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Sincerely,

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Peggy J. Casey, P.E. Environmental Projects Engineer

Enclosures

Copies: MoDOT, Environmental Section, Gayle Unruh HNTB, Tim Flagler



U.S. Department of Transportation Federal Highway Administration

Missouri Division

Allen Masuda, Division Administrator

3220 W. Edgewood, Suite H Jefferson City, Missouri 65109 (573) 636-7104 Fax (573) 636-9283 Missouri.FHWA@fhwa.dot.gov

August 22, 2008

Mr. Jim Gray, Principal Chief Osage Nation of Oklahoma 627 Grandview P.O. Box 779 Pawhuska, OK 74056

Attn: Dr. Andrea Hunter, THPO

Subject:

I-70, Jackson County, Missouri

I-70 First Tier Environmental Impact Statement

MoDOT Job No. J4I1486B

Invitation to Become a Consulting Party for Section 106 Issues

Dear Chief Gray:

The Federal Highway Administration (FHWA) in cooperation with the Missouri Department of Transportation (MoDOT) is initiating a First Tier Environmental Impact Statement (FTEIS) to consider impacts of improvements to I-70 from the Missouri/Kansas state line to I-470 in Jackson County, Missouri. The project will include the entire downtown Kansas City central business district (CBD) freeway loop. The project length is approximately 20 miles, including all segments of the downtown Kansas City CBD freeway loop. A copy of the project location map is enclosed.

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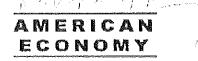
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Peggy J. Casey, P.E. Environmental Projects Engineer

Enclosures

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HNTB, Tim Flagler



Missouri Division



Administration

Allen Masuda, Division Administrator

3220 W. Edgewood, Suite H Jefferson City, Missouri 65109 (573) 636-7104 Fax (573) 636-9283 Missouri.FHWA@fhwa.dot.gov

August 22, 2008

Mr. Guy Munroe, Chairman Kaw Nation Drawer 50 Kaw City, OK 74641

Attn: Ms. Crystal Douglas NAGPRA

Subject:

I-70, Jackson County, Missouri

I-70 First Tier Environmental Impact Statement

MoDOT Job No. J4I1486B

Invitation to Become a Consulting Party for Section 106 Issues

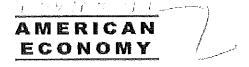
Dear Chairman Munroe:

The Federal Highway Administration (FHWA) in cooperation with the Missouri Department of Transportation (MoDOT) is initiating a First Tier Environmental Impact Statement (FTEIS) to consider impacts of improvements to I-70 from the Missouri/Kansas state line to I-470 in Jackson County, Missouri. The project will include the entire downtown Kansas City central business district (CBD) freeway loop. The project length is approximately 20 miles, including all segments of the downtown Kansas City CBD freeway loop. A copy of the project location map is enclosed.

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Sincerely,

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Peggy J. Casey, P.E. Environmental Projects Engineer

Enclosures

Copies: MoDOT, Environmental Section, Gayle Unruh

HNTB, Tim Flagler



Missouri Division



Allen Masuda, Division Administrator

3220 W. Edgewood, Suite H Jefferson City, Missouri 65109 (573) 636-7104 Fax (573) 636-9283 Missouri.FHWA@fhwa.dot.gov

August 22, 2008

Ms. Christie Modlin, Chairperson Iowa Tribe of Oklahoma R.R. 1, Box 721 Perkins, OK 74059-9599

Attn: Ms. Joyce Miller, Historic Preservation

Subject:

I-70, Jackson County, Missouri

I-70 First Tier Environmental Impact Statement

MoDOT Job No. J4I1486B

Invitation to Become a Consulting Party for Section 106 Issues

Dear Chairperson Modlin:

The Federal Highway Administration (FHWA) in cooperation with the Missouri Department of Transportation (MoDOT) is initiating a First Tier Environmental Impact Statement (FTEIS) to consider impacts of improvements to I-70 from the Missouri/Kansas state line to I-470 in Jackson County, Missouri. The project will include the entire downtown Kansas City central business district (CBD) freeway loop. The project length is approximately 20 miles, including all segments of the downtown Kansas City CBD freeway loop. A copy of the project location map is enclosed.

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Sincerely,

//original signature//

Peggy J. Casey, P.E. Environmental Projects Engineer

Enclosures

Copies: MoDOT, Environmental Section, Gayle Unruh

HNTB, Tim Flagler



Missouri Division



Allen Masuda, Division Administrator

3220 W. Edgewood, Suite H Jefferson City, Missouri 65109 (573) 636-7104 Fax (573) 636-9283 Missouri.FHWA@fhwa.dot.gov

August 22, 2008

Mr. Gregory E. Pyle, Chief Choctaw Nation of Oklahoma
P.O. Drawer 1210
16th and Locust Street
Durant, OK 74702-1210

Attn: Mr. Terry Cole, NAGPRA

Subject:

I-70, Jackson County, Missouri

I-70 First Tier Environmental Impact Statement

MoDOT Job No. J4I1486B

Invitation to Become a Consulting Party for Section 106 Issues

Dear Chief Pyle:

The Federal Highway Administration (FHWA) in cooperation with the Missouri Department of Transportation (MoDOT) is initiating a First Tier Environmental Impact Statement (FTEIS) to consider impacts of improvements to I-70 from the Missouri/Kansas state line to I-470 in Jackson County, Missouri. The project will include the entire downtown Kansas City central business district (CBD) freeway loop. The project length is approximately 20 miles, including all segments of the downtown Kansas City CBD freeway loop. A copy of the project location map is enclosed.

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Peggy J. Casey, P.E. Environmental Projects Engineer

Enclosures

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HNTB, Tim Flagler



U.S. Department of Transportation Federal Highway Administration

Missouri Division

Allen Masuda, Division Administrator

3220 W. Edgewood, Suite H Jefferson City, Missouri 65109 (573) 636-7104 Fax (573) 636-9283 Missouri.FHWA@fhwa.dot.gov

August 22, 2008

Mr. Kerry Holton, President Delaware Nation P.O. Box 825 Anadarko, OK 73005

Attn: Ms. Tamara Francis, NAGPRA Director

Subject:

I-70, Jackson County, Missouri

I-70 First Tier Environmental Impact Statement

MoDOT Job No. J4I1486B

Invitation to Become a Consulting Party for Section 106 Issues

Dear President Holton:

The Federal Highway Administration (FHWA) in cooperation with the Missouri Department of Transportation (MoDOT) is initiating a First Tier Environmental Impact Statement (FTEIS) to consider impacts of improvements to I-70 from the Missouri/Kansas state line to I-470 in Jackson County, Missouri. The project will include the entire downtown Kansas City central business district (CBD) freeway loop. The project length is approximately 20 miles, including all segments of the downtown Kansas City CBD freeway loop. A copy of the project location map is enclosed.

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//original signature//

Peggy J. Casey, P.E. Environmental Projects Engineer

Enclosures

Copies: MoDOT, Environmental Section, Gayle Unruh

HNTB, Tim Flagler



Tribal Consultation Options

Name Cystal Tribe Kue No	Douglas				
	÷i σΛ.				
Address City, State Zip					
Project Name: I-70 Firs	t Tier EIS in Jackson County				
Please check the appro	opriate response:				
consult direc	The Kaw Nation Tribe, a federally recognized tribe, would like to consult directly with the Federal Highway Administration and Missouri Department of Transportation in a government-to-government relationship for this proposed project.				
The project and fu	Tribe	has no interest associated with this proposed			
Use the back of this form	n or additional sheets if you would I	ike to make additional comments.			
Crystal D	ovalus	500 269 - 2552 Telephone			
Crystal D Tribal Representative (P	lease print)	Telephone			
ally	2 -	10-27-08			
Tribal Representative(Si	gnature)	Date			
Mail: KV	tu Nation				
	ner 50 Kan City	hx 74641			
	50 269 - 2552	Sc., /ts/			
	80 269 1157				
	louglas examnation	5N 1 CO.M.			
Other: (Please describe)					
If you have chosen to proceed with consultation, please identify a Tribal Representative for the consultation.					
Name of Formal Tribal F	Representative (Please print)	Telephone			
Name of Formal Tribal Representative (Signature) Date					
Please mail to:	Envelope Enclosed: Allen Masuda FHWA 3220 W. Edgewood Suite H Jefferson City, MO 65109	My if you Discours Human Remains a Atchological materials Cyntisch			
Or, Fax to:	573-636-9283	Grand			



Tribal Consultation Options

	ge Nation				
Address 627 Grandview					
City, State Zip fawhuska, OK 74056					
Project Name: I-70 First Tier EIS in Jackson County					
Please check	k the appropriate response:				
_ K Th	The Osage Motion Tribe, a federally recognized tribe, would like to consult directly with the Federal Highway Administration and Missouri Department of Transportation in a government-to-government relationship for this proposed project.				
Th	e Tribe has no into ject and further consultation is not required.	erest associated with this proposed			
Use the back	of this form or additional sheets if you would like to make	additional comments.			
1	EA A HUNTER	918-287-5671			
Tribal Repres	sentative (Please print)	9:8-287-5671 Telephone			
Angle	a h. Hunter	11-2-08			
Tribal Repres	sentative(Signature)	Date			
Mall:					
	Paulmska OK 74056				
Phone:	918-287-5671				
Fax:	918-287-5376				
E-mail:	ahunter@ osasetribe.ovo				
Other:					
(Please desc					
If you have consultation.	chosen to proceed with consultation, please identif				
A Name of For	mal Tribal Representative (Please print)	918-287-5671 Telephone			
	The representative (Flores print)	11-2-08			
Name of For	mal Tribal Representative (Signature)	Date			
Please mail t	Envelope Enclosed: Allen Masuda FHWA 3220 W, Edgewood Suite H Jefferson City, MO 65109				
Or, Fax to:	573-636-9283				

Appendix E.4 Public Notices				

news

Missouri Department of Transportation



FOR IMMEDIATE RELEASE August 28, 2008

For more information, contact: Steve Porter, (816) 622-6329

Future of I-70 to Be Discussed at Public Meetings in September

LEE'S SUMMIT, Mo. – MoDOT is asking for public input on the future of I-70 from the Kansas state line to the I-470 interchange during meetings this September at sites near the I-70 corridor.

These meetings are part of the First Tier Environmental Impact Study (FTEIS) of this heavily used 18-mile corridor that includes the Downtown Loop and the busy I-435 and I-470 interchanges. MoDOT wants to hear how nearby residents, businesses and travelers perceive the interstate corridor's future, what they expect the highway system to deliver and what other options should be considered to satisfy transportation needs and provide options to all the traveling public.

The I-70 study will outline a broad strategy to address issues in this corridor. When the study concludes in 2010, MoDOT will have a general understanding of the public's needs and expectations, how improvements might affect nearby properties and what strategies to pursue in more detail to deliver better transportation services.

This study will not determine specific improvements or how they may affect this corridor. It will not pick a design, but it will lay the groundwork to help planners approach the challenges. The environmental impact study is part of a federally-mandated series of planning steps that ensures many factors are considered before design and location decisions are made.

Public meetings to discuss this study will be:

- 4-7 p.m. Tuesday, Sept. 9, St. Paul's School of Theology, 5123 Truman Rd., KCMO
- 4-7 p.m. Thursday, Sept. 11, Truman High School, Independence Informational coffees to discuss this study will be:
- 9-11 a.m. Saturday, Sept. 13, Central High School, 3221 Indiana Ave., KCMO
- 9-11 a.m. Saturday, Sept. 27, Don Bosco Center, 580 Campbell Street, KCMO

District 4

For more information about other projects in the area, please visit MoDOT's I-70 study Web site at www.modot.org/kansascity/metroi70

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Questions & Comments?

Contact MoDOT Project Manager, Allan Zafft, at 816-622-0687 or allan.zafft@modot.mo.gov.

Visit us at: www.modot.org/kansascity/metroi70.

Write MoDOT at 600 NE Colbern Road Lee's Summit, MO 64086



MoDOT Stays Ahead of the Curve with I-70 Environmental Study in KC Metro

The Missouri Department of Transportation (MoDOT) is beginning an environmental study of I-70 in Jackson County. The study is a First Tier Environmental Impact Statement (FTEIS) for the Future I-70 Kansas City Metro project. The study spans 18 miles of I-70 from the last ramp termini east of the Missouri – Kansas state line to just east of I-470 and includes all of the Downtown Kansa City Central Business District Freeway Loop. The planning process is anticipated to be completed in 2010 with the Final First Tier Environmental Impact Statement and Record of Decision.



The FTEIS Process Step by Step

As an I-70 stakeholder you may have participated in the I-70 Major Investment Study (MIS), which was completed in 2004. An examination of concepts developed during the I-70 MIS will be part of the current FTEIS project. In fact during Step 2 of the I-70 FTEIS process, the Study Team will build on data from the I-70 MIS to define why improvements are needed along I-70. The Purpose and Need statement will identify the transportation problems that successful improvement strategies need to address. The Purpose and Need information can be refined during the course of the study. However, it will be deemed firm by the time of the approval of the final environmental document, which is anticipated for March 2010. MoDOT will hold open house public meetings September 9th and 11th to discuss the Purpose and Need with the community.

Share Your Thoughts

MoDOT is holding public meetings for the I-70 community this September to discuss the project's purpose and need, constraints, and initial strategies. The meetings will be open houses, so you are welcome to come and go as you please. Access for the physically disabled is available. You can also choose which meeting you want to attend:

Tuesday, September 9, 2008

4:00 PM – 7:00 PM St. Paul School of Theology, Holter Center 5123 Truman Road Kansas City, Missouri 64127

Saturday, September 13, 2008

9:00 AM – 11:00 AM Central High School 3221 Indiana Avenue Kansas City, Missouri 64128

Thursday, September 11, 2008

4:00 PM – 7:00 PM Truman High School Cafeteria 3301 S. Noland Road Independence, Missouri 64055

Saturday, September 27, 2008

¿Preguntas y Comentarios?

Contacte al Gerente de Proyecto Allan Zafft 816-622-0687 allan.zafft@modot.mo.gov.

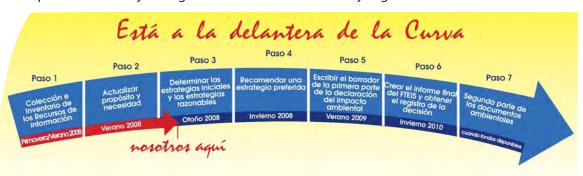
Visiténos en: www.modot.org/kansascity/metroi70.

Escriba a MoDOT al: 600 NE Colbern Road Lee's Summit, MO 64086



MoDOT Está a la delantera de la Curva con un estudio del ambiente en el área Metropolitana de Kansas City

El Departamento de Transportación de Missouri (MoDOT) está empezando un estudio en la I-70 del Condado De Jakcson. El estudio es la primera parte del Impacto Ambiental (FTEIS) sobre el futuro del proyecto del área metro de Kansas City en la I-70. El estudio se extiende 18 millas desde la I-70 hasta la rampa terminal este de la línea estatal de Missouri y Kansas a solo el este de la I-470 e incluye todo el Distrito Central de Negocios de la Ciudad de Kansas City en la autopista. El proceso de planeamiento se anticipa que este completado con la primera parte del Impacto Ambiental y un Registro de la Decisión. Ambiental y Registro de la Decisión.



El proceso de FTEIS paso por paso

Como usted es uno de los accionistas, usted tal vez ha participado en el estudio de inversión de mejoras de la I-70 (MIS), el cual fue completado en el 2004. Una reexaminación de los conceptos se desarrolló durante el Estudio I-70 MIS que formará parte del proyecto actual FTEIS. De hecho durante el Paso 2 del proceso de la I-70, el equipo de estudio empezará a construir con información del estudio I-70 MIS que define las mejoras necesarias a través de la I-70. La declaración de propósito y necesidad identificara los problemas de transportación que con éxito mejoraran las estrategias que necesitan dirección. El propósito y la necesidad de información que puede ser definido durante el curso del estudio. Sin embrago será definido con firmeza al momento de ser aprobado en el documento final del ambiente, que se anticipa sea para marzo del 2010. MoDOT tendrá reuniones públicas de casa abierta en septiembre para discutir el Propósito y la Necesidad con la comunidad.

Comparta Sus Pensamientos

MoDOT tendrá una reunión pública para la comunidad de la I-70 este septiembre para discutir el propósito y la necesidad, restricciones y las estrategias iniciales. Las reuniones serán casas abiertas, así que usted esta invitado a asistir cuando quiera. Acceso para las personas con discapacitadas físicas estará disponible. Usted puede escoger la reunión que desee asistir:

Martes, 9 de septiembre, 2008

4:00 PM – 7:00 PM St. Paul School of Theology, Holter Center 5123 Truman Road Kansas City, Missouri 64127

Sábado, 13 de septiembre, 2008

9:00 AM – 11:00 AM Central High School 3221 Indiana Avenue Kansas City, Missouri 64128

Jueves, 11 de septiembre, 2008

4:00 PM – 7:00 PM Truman High School Cafeteria 3301 S. Noland Road Independence, Missouri 64055

Sábado, 27 de septiembre, 2008

Questions & Comments?

Contact MoDOT Project Manager, Allan Zafft, at 816-622-0687 or allan.zafft@modot.mo.gov.

Visit us at: www.modot.org/kansascity/metroi70.

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Saturday, September 27, 2008

Nha MoDOT ở phía trên đường đồ biểu với bản nghiên cứu môi trường I-70 vùng KC

Nha Giao Thông Vận chuyển bang Missouri (MoDOT) đang bắt đầu nghiên cứu môi trường của xa lộ I-70 trong hạt Jackson. Sự nghiên cứu là Văn bản Ảnh hưởng Môi trường phần thứ nhất (FTEIS) cho công trình tương lai xa lộ I-70 vùng Kansas City Nó kéo dài 18 dậm của I-70 từ đường dốc tẻ cuối phía đông của đường ranh Missouri và Kansas đến phía đông của I-470 và gồm tất cả đường vòng Trung tâm thương mại Kansas City. Dự trù tiến trình được tiên đoán hoàn tất năm 2010 với Bản văn Ảnh hưởng Môi trường phần thứ nhất sau cùng và Hồ sơ Quyết định.

Từng Bước Một Tiến Trình FTEIS

Là đối tượng liên hệ I-70 bạn có thể tham gia vào **Nghiên Cứu Đầu tư Chánh I-70 (MIS)** nó đã hoàn tất năm 2004. Khảo sát những ý tương phát triển trong **I-70 MIS** sẽ là thành phần của công trình FTEIS hiện tại. Thật ra trong bước thứ nhì của tiến trình I-70 FTEIS, ban nghiên cứu sẽ xây dựng dử kiện từ **I-70 MIS** để định rõ tại sao những cải tiến là cần thiết dọc xa lộ I-70. Văn bản về mục đích và nhu cầu sẽ nhận ra những vấn đề giao thông để kế hoạch cải tiến thành công được nêu lên. Thông tin về mục đích và nhu cầu có thể được sàng lọc trong quá trình nghiên cứu. Tuy nhiên, nó sẽ được đánh giá chắc chấn vào lúc chấp thuận của văn kiện sau cùng về môi sinh, được dự đoán vào tháng Ba năm 2010. **Nha MoDOT sẽ mở những phiên họp công chúng tự do** vào tháng Chín để bàn thảo về Mục đích và Nhu cầu với cộng đồng.

CÀI VÀO ĐỒ HÌNH MỐC THỜI GIAN

Bước 1: Thâu lượm và Kiểm kê những dữ kiện tiềm năng Mùa Xuân/Hè 2008

Bước thứ 2: Cập nhật Mục đích và Nhu cầu

Mùa Hè 2008 Bước thứ 3: Quyết định những kế hoạch khởi đầu và các Kế hoạch Hữu lý

Mùa Thu 2008

Bước thứ 4: Đề nghị kế hoạch được chọn Mùa Đông 2008

Bước thứ 5: Viết bản thảo Bảu Văn Ảnh Hưởng Môi trường phần thứ nhất Mùa Hè 2009

Bước thứ 6: Tạo bản FTEIS cuối cùng và nhận Hỗ sơ quyết định

Bước thứ 7: Văn kiện về Môi trường phần thứ nhì

Tùy thuộc vào ngân sách chuẩn chi

Có Câu Hỏi Và Phê Bình?

- Liên lạc Giám đốc công trình Nha MoDOT Allan Zafft, số 816-622-0687 hoặc allan.zafft@modot.mo.gov.
- Viéng trang mang www.modot.org/kansascity/metroi70.
- Viết cho Nha MoDOT ở 600 NE Colbern Road Lee's Summit, MO 64086

Chia Sẻ Các Cảm Tưởng Của Bạn

Nha MoDOT tổ chức các buổi họp công công cho cộng đồng I-70 vào tháng Chín nầy để bào thảo về mục đích và nhu cầu của công trình, giới han và những kế hoach khởi đầu. Các buổi họp mở cử tư do, do đó ban đến và đi tùy ý. Có lối vào dành cho người khuyết tât thể chất. Ban có thể chon buổi họp mà ban muốn tham dư.



4:00 PM – 7:00 PM St. Paul School of Theology, Holter Center 5123 Truman Road Kansas City, Missouri 64127

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Saturday, September 27, 2008







How would you **Improve I-70?**

Ask us, Tell us! Turn over for contact information.

www.modot.org/kansascity/metroi70





Ask us, Tell us! Turn over for contact information.

www.modot.org/kansascity/metroi70



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We're Here to Listen MoDOT Contact Us! 600 NE Colbern Road write Lee's Summit, MO 64086

www.modot.org/kansascity/metroi70

allan.zafft@modot.mo.gov

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1-888-ASK-MODOT (275-6636) **Project Manager** allan.zafft@modot.mo.gov Allan Zafft

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Project Manager Allan Zafft

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Project Manager Allan Zafft

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e-mail allan.zafft@modot.mo.gov Allan Zafft e-mail allan.zafft@modot.mo.gov Allan Zafft	e-mail	allan.zafft@modot.mo.gov			e-mail	allan.zafft@modot.mo.gov	•	
visit www.modot.org/kansascity/metroi70 visit www.modot.org/kansascity/metroi70	visit	www.modot.org/kansascity/metroi	70		visit	www.modot.org/kansascity/metroi	70	

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call	1-888-ASK-MODOT (275-6636)	Project Manager		call	1-888-ASK-MODOT (275-6636)	Project Manager
e-mail	allan.zafft@modot.mo.gov	Allan Zafft		e-mail	allan.zafft@modot.mo.gov	Allan Zafft
visit	www.modot.org/kansascity/metroi7	70		visit	www.modot.org/kansascity/metroi	70

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Project Manager: Gerente de Proyecto:

Allan Zafft

1-888-ASK-MODOT allan.zafft@modot.mo.gov



¡Queremos tener noticias de Usted!

We Want to Hear from You!

MoDOT Stays Ahead of the Curve with I-70 Environmental Study in KC Metro

MoDOT se mantiene adelante en los estudios ambientales de I-70 en el metro de KC

Listening Post

Tuesday, January 6th, 2009

Puesto de Escucha

Martes, 6 de enero de 2009

4:00 PM - 7:00 PM

St. Paul School of Theology, Holter Center 5123 Truman Road, KC, MO 64127

On-Line Comment

January 2nd - 31st, 2009

Comentarios por Línea Electrónica

2 -31 de enero de 2009

go to / vaya a

www.modot.org/kansascity/metroi70

www.modot.org/kansascity/metroi70



For more information visit: Para mas información visítenos en : www.modot.org/ kansascity/metroi70

MoDOT has prepared a series of possible improvement strategies for I-70. They will be on display at the January 6th Listening Post and available for review and comment at www.modot.org/kansascity/metroi70. You can attend the Listening Post (a.k.a. open house public meeting) to comment or review and blog about the strategies at our website. We look forward to hearing from you!

MoDOT ha preparado una serie de posibles estrategias para mejorar la I-70. Estas serán presentadas el 6 de enero. El puesto de escucha estará disponible para revisión y comentarios en el sitio de la red www.modot.org/kansascity/metroi70. Usted puede asistir al Puesto de Escucha "Listening Post" (también conocido como sesión publica "Open House") para comentarios o revisiones y blog acerca de las estrategias en nuestro sitio en la red. ¡Nosotros queremos escuchar de ustedes!

Patti Banks Associates 929 Walnut, Suite 200 Kansas City, MO 64106 Project Manager: Giám Đốc Chương Trình Allan Zafft 1-888-ASK-MODOT

allan.zafft@modot.mo.gov



Chúng Tôi Muốn Nghe Từ Các Bạn!

We Want to Hear from You!

MoDOT Stays Ahead of the Curve with I-70 Environmental Study in KC Metro
Nha MoDOT ở phần trên của đồ biểu với bản nghiên cứu môi trường I-70 vùng KC

Listening Post

Tuesday, January 6, 2009

Tram Nghe Tin

Thứ Ba, ngày 6 tháng 1, 2009

4:00 PM – 7:00 PM St. Paul School of Theology, Holter Center 5123 Truman Road, KC, MO 64127

On-Line Comment

January 2nd - 31st, 2009

Phê Bình Trên Mạng

Tháng 1, từ ngày 2 đến 31, 2009

go to / Vào địa chỉ mạng www.modot.org/kansascity/metroi70

www.modot.org/kansascity/metroi70



For more information visit: Dổ biết thêm chi tiết viếng: www.modot.org/ kansascity/metroi70

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Nha Giao Thông MoDOT đã chuẩn bị nhiều kế hoạch cải tiến khả thi cho xa lộ I-70. Những kế hoạch này được trưng bày ngày 6 tháng 1, 2009 ở Trạm Nghe Tin và sản sảng để xem xét và phê bình trên mạng ở địa chỉ www.modot.org/kansascity/metri70 Bạn có thể tham dự Trạm Nghe Tin (được biết như buổi họp công chúng tự do) để phê bình và xem xét và ghi (blog) về những kế hoặch trên mạng của chúng tôi. Chúng tôi trông chờ được nghe từ các bạn!

Patti Banks Associates 929 Walnut, Suite 200 Kansas City, MO 64106

MoDOT Kansas City Area District News Release

Stephen Porter 816-622-6329 or Michele Watley 816-622-6312

December 30, 2008

Improvement Strategies for I-70 Available Online

MoDOT seeks public input on the proposed improvement strategies for the Future I-70 Kansas City Metro Project from the Kansas state line to just east of the I-470 interchange. MoDOT will host an online public meeting from January 2 through January 31 with an interactive presentation and blog for the public to voice its opinion and ask questions regarding the project.

In an effort to keep the public informed and involved in this project, MoDOT has incorporated an online public meeting. The meeting, posted on MoDOT's I-70 project website at www.modot.org/kansascity/metroi70, will feature an interactive presentation that provides an indepth look at each of the four different strategies proposed by MoDOT. The public will have the opportunity to comment on each of the proposed strategies on a blog that will also be available on the website.

Those who prefer to talk with a MoDOT representative in person are invited to attend a Listening Post, also known as an open house public meeting, on Tuesday, January 6, at St. Paul's School of Theology, 5123 Truman Rd., Kansas City, MO, 64127. Representatives from MoDOT will be available from 4 to 7 p.m. to receive public input and answer questions about the proposed strategies. Improvement strategy packages will also be on display at the meeting and on the I-70 Project website.

The online meeting and Listening Post is part of the First Tier Environmental Impact Study (FTEIS) of the heavily used 18-mile corridor that includes the Downtown Loop and the busy I-435 and I-470 interchanges. The I-70 study will outline a broad strategy to address issues in this corridor, and will give MoDOT a general understanding of the public's needs and expectations concerning this project. The study will also examine how improvements might affect nearby properties and what strategies to pursue to deliver better transportation services.

The study will not determine specific improvements or how they may affect specific properties. It will not pick a design, but will lay the groundwork to help planners and engineers approach the challenges. The environmental impact study is part of a federally-mandated series of planning steps that ensures many factors are considered before design and location decisions are made.

For more information about Future I-70, visit www.modot.org/kansascity/metroi70. You can also contact MoDOT Project Manager Allan Zafft, by phone at 816-622-0687 or by email at allan.zafft@modot.mo.gov

For more information about other projects in the area, please visit MoDOT's website at www.modot.mo.gov/kansascity.

Appendix E.5 Public Brochures/Newsletters				

Share Your Thoughts

MoDOT is holding two large public meetings for the I-70 community on September 9th and 11th. The meetings will be formatted as open houses, so you are welcome to come and go as you please. Access for the physically disabled is available. No formal presentations will be given and the same materials will be on display at both meetings. Staff from MoDOT and the consultant team will be on hand to discuss the project's purpose and need, constraints, and initial strategies with you, so ask questions and share your thoughts with us. You can choose which meeting you want to attend below.

Comparta Sus Pensamientos

MoDOT tendrá dos grandes reuniones públicas para la comunidad de la I-70 el 9 y 11 de septiembre. Las reuniones serán en un formato de casas abiertas, así que usted es bienvenido cuando quiera. Habrá acceso para personas con impedimentos físicos. No habrá presentaciones formales y el mismo material será puesto en ambas reuniones. El personal de MoDOT y el equipo de consulta

estarán disponibles para discutir la necesidad y propósito, restricciones, y las estrategias iniciales con ustedes, así que usted puede compartir sus pensamientos con nosotros. Usted puede escoger la reunión que quiera asistir:

Tuesday, September 9, 2008 Martes, 9 de septiembre, 2008

4:00 PM-7:00PM

St. Paul School Of Theology, Holter Center 5123 Truman Road Kansas City, MO 64127 Thursday, September 11, 2008 Jueves, 11 de septiembre, 2008

4:00 PM-7:00 PM

Truman High School Cafeteria

3301 S. Noland Road Independence, MO 64055







with I-70 Environmental Study in KC Metro

The Missouri Department of Transportation (MoDOT) is beginning an in-depth environmental study of I-70 in Jackson County. The study is a First Tier Environmental Impact Statement (FTEIS) for the Future I-70 Kansas City Metro project. It spans 18 miles of I-70 from the last ramp termini east of the Missouri – Kansas state line to just east of I-470 and includes all of the Downtown Kansas City Central Business District Freeway Loop. The planning process is anticipated to be completed in 2010 with the Final First Tier Environmental Impact Statement and Record of Decision.

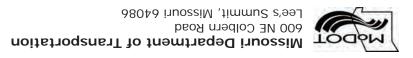






MoDOT Está a la delantera de la Curva con un estudio del ambiente en el área Metropolitana de Kansas City

El Departamento de Transportación de Missouri (MoDOT) está empezando un estudio en la I-70 del Condado De Jakcson. El estudio es la primera parte del Impacto Ambiental (FTEIS) sobre el futuro del proyecto del área metro de Kansas City en la I-70. El estudio se extiende 18 millas desde la I-70 hasta la rampa terminal este de la línea estatal de Missouri y Kansas a solo el este de la I-470 e incluye todo el Distrito Central de Negocios de la Ciudad de Kansas City en la autopista. El proceso de planeamiento se anticipa que este completado con la primera parte del Impacto Ambiental y un Registro de la Decisión.



staying ahead of the curve Está a la delantera de la Curva

Step/Paso 1

Collect & Inventory
Resource Data
Colección e Inventario
de los Recursos de
información

spring / primavera 2008

Step/Paso 2

Update Purpose and Need

Determine Initial & Reasonable Strategies

Determinar las estrategias

Actualizar propósito y necesidad

summer /verano 2008

Step/Paso 3

iniciales y las estrategias

razonables

fall /otoño 2008

we are here!

Step/Paso 4

Recommend a

Preferred Strategy

Recomendar una estrategia

preferida

winter / invierno 2008

Step/Paso 5

Draft First Tier Environmental Impact Statement

Escribir el borrador de la primera parte de la declaración del impacto ambiental

summer / verano 2009

Step/Paso 6

Final FTEIS & Obtain a ROD

Crear el informe final del FTEIS y obtener el registro de la decisión winter / invierno 2010 Step/Paso 7

Second Tier Environmental

Segunda parte de los documentos ambientales

Cuando fondos disponir

WHAT'S HAPPENING?

The FTEIS Process

Contact: Project Manager

Allan Zafft

816-622-0687

allan.zafft@modot.mo.gov.

Visit us at: www.modot.org/

Study (MIS), which was an examination of conduction of conduc

Write MoDOT at: 600 NE Colbern Road

Lee's Summit, MO 64086

kansascity/metroi70.

Questions & Comments?

As an I-70 stakeholder you may have participated in the I-70 Major Investment Study (MIS), which was completed in 2004. An examination of concepts developed during the I-70 MIS will be part of the current FTEIS project. In fact during Step 2 of the I-70 FTEIS process, the Study Team will build on data from the I-70 MIS to define why improvements are needed along I-70. The Purpose and Need statement will identify the transportation problems that successful improvement strategies need to address. The Purpose and Need information can



be refined during the course of the study.
However, it will be deemed firm by the time of the approval of the final environmental document, which is anticipated for March 2010. MoDOT will hold open house public meetings September 9th and 11th to discuss the Purpose and Need with the community.

FAQs

Q. Why study I-70?

A. MoDOT recognizes that though I -70 is aging and in need of improvement, it is one of the Kansas City region's key commercial and commuter thoroughfares carrying tens of thousands of travelers and tons of goods daily to destinations all-around and through the Kansas City region. MoDOT is committed to making the drive along the I-70 corridor as smooth, safe, and efficient as possible. Doing so requires a comprehensive transportation planning process of which the First Tier Environmental Impact Statement (FTEIS) is a key component.

Q. What is meant by strategies?

A. Strategies are general, high level transportation improvement opportunities to address the transportation issues along I-70. Strategies may include a series of specific transportation improvements such as adding lanes, fixing existing pavement and bridges, improving interchange ramps, and/or transit projects.

¿Qué Pasa?

El Proceso de FTEIS

Como usted es uno de los accionistas, usted tal vez ha participado en el estudio de inversión de mejoras de la I-70 (MIS), el cual fue completado en el 2004. Una reexaminación de los conceptos se desarrolló durante el Estudio I-70 MIS que formará parte del proyecto actual FTEIS. De hecho durante el Paso 2 del proceso de la I-70, el equipo de estudio empezará a construir con información del estudio I-70 MIS que define las mejoras necesarias a través de la I-70. La declaración de propósito y necesidad identificara los problemas de transportación que con éxito mejoraran las estrategias que necesitan dirección. El propósito y la necesidad de información que puede ser definido durante el curso del estudio. Sin embrago será definido con firmeza al momento de ser aprobado en el documento final del ambiente, que se anticipa sea para marzo del 2010. MoDOT tendrá reuniones públicas de casa abierta en septiembre para discutir el Propósito y la Necesidad con la comunidad.

Preguntas

Q; Por qué un estudio de la I-70?

A. MoDOT reconoce que la I-70 esta envejeciendo y necesita mejoras. Es una de las regiones de Kansas City clave para el



comercio y personas que viajan diariamente cargando miles de toneladas de viajeros y miles de toneladas de víveres a varios destinos a través de toda la región de Kansas City. MoDOT esta comprometido ha hacer que viajar a través de el corredor de la I-70 sea fácil, seguro lo mas eficientemente posible. Para hacer eso se requiere un proceso comprensivo de planes que serán la FTEIS que es una parte clave.

Q. ¿Qué quieren decir con estrategias?

A. Las estrategias son generales, la oportunidad de mejorar la transportación a un alto nivel que pueda tratar con los problemas a través de I-70. Las estrategias incluyen una serie específica de mejoras de transportación como añadiendo carriles, arreglando el pavimento existente y los puentes, mejorando el intercambio en las rampas y/o proyecto de transito.





¿Preguntas y Comentarios? Contacto: Gerente de Proyecto Allan Zafft 816-622-0687

allan.zafft@modot.mo.gov.

visítenos en: www.modot. org/kansascity/metroi70.

Escriba a MoDOT al: 600 NE Colbern Road Lee's Summit, MO 64086

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Chia Sẻ Những ý tưởng của bạn

Nha MoDOT tổ chức hai buổi họp công cộng lớn cho cộng đồng I-70 vào ngày 9 và 11 tháng Chín. Các buổi họp được tổ chức theo hình thức mở cửa tự do, để bạn được đón nhận đến và đi tùy ý. Có đường vào dành cho người khuyết tật thể chất. Không có diển giảng chính thức và cùng tài liệu sẽ được trưng bày trong hai phiên họp. Ban hưởng dẩn từ Nha MoDOT và Ban cố vấn sẽ có mặt để thảo luận mục đích và nhu cầu của công trình, khó khăn và những kế hoạch khởi đầu với bạn, do đó hãy chia sẻ cảm nghỉ với chúng tôi.

Có Câu Hỏi Và Phê Bình?

- Liên lạc Giám đốc công trình Nha MoDOT, Allan Zafft, số 816-622-0687 hoặc allan.zafft@modot.mo.gov.
- Viếng trang mạng www.modot.org/kansascity/metroi70.
- Viết cho Nha MoDOT ở 600 NE Colbern Road, Lee's Summit, MO 64086

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Nha MoDOT ở phía trên đường đồ biểu với bản nghiên cứu môi trường I-70 vùng KC $\,$

Nha Giao Thông Vận chuyển bang Missouri (MoDOT) đang bắt đầu nghiên cứu môi trường của xa lộ I-70 trong hạt Jackson. Sự nghiên cứu là Văn bản Ảnh hưởng Môi trường phần thứ nhất (FTEIS) cho công trình tương lai xa lộ I-70 vùng Kansas City Nó kéo dài 18 dậm của I-70 từ đường dốc tẻ cuối phía đông của đường ranh Missouri và Kansas đến phía đông của I-470 và gồm tất cả đường vòng Trung tâm thương mại Kansas City. Dự trù tiến trình được tiên đoán hoàn tất năm 2010 với Bản văn Ảnh hưởng Môi trường phần thứ nhất sau cùng và Hồ sơ Quyết định.



staying ahead of the curve Step 2 Step 7 Step 1 **Draft First Tier** Final FTEIS and Update Purpose and Need **Preferred Strategy** and Reasonable Obtain a ROD mpact Statement Strategies summer 2009 we are here!

WHAT'S HAPPENING

Ouestions & Comments? Contact: Project Manager

Allan Zafft 816-622-0687 allan.zafft@modot.mo.gov.

visit us at: www.modot.org/ kansascity/metroi70.

Write MoDOT at: 600 NE Colbern Road Lee's Summit, MO 64086

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Từng Bước Một Tiến Trình FTEIS

Là đối tượng liên hệ I-70 bạn có thể tham gia vào Nghiên Cứu Đầu tư Chánh I-70 (MIS) nó đã hoàn tất năm 2004. Khảo sát những ý tương phát triển trong I-70 MIS sẽ là thành phần của công trình FTEIS hiện tại. Thật ra trong bước thứ nhì của tiến trình I-70 FTEIS, ban nghiên cứu sẽ xây dựng dử kiện từ I-70 MIS để định rố tại sao những cải tiến là cần thiết dọc xa lộ I-70. Văn bản về mục đích và nhu cầu sẽ nhận ra những vấn đề giao thông để kế hoạch cải tiến thành công được nêu lên. Thông tin về mục đích và nhu cầu có thể được sàng lọc trong quá trình nghiên cứu. Tuy nhiên, nó sẽ được đánh giá chắc chắn vào lúc chấp thuận của văn kiện sau cùng về môi sinh, được dự đoán vào tháng Ba năm 2010. Nha MoDOT sẽ mở những phiên họp công chúng tự do vào ngày 9 và 11 tháng Chín để bàn thảo về Mục đích và Nhu cấu với cộng đồng.

CÀI VÀO ĐỒ HÌNH MỐC THỜI GIAN

Bước 1: Thâu lượm và Kiểm kê những dữ kiện tiềm năng Mùa Xuân/Hè 2008

Bước thứ 2: Cập nhật Mục đích và Nhu cầu Mùa Hè 2008

Bước thứ 3: Quyết định những kế hoạch khởi đầu và các Kế hoạch Hữu lý Mùa Thu 2008

Bước thứ 4: Đề nghị kế hoạch được chọn Mùa Đông 2008

Bước thứ 5: Viết bản thảo Bản Văn Ảnh Hưởng Môi trường phần thứ nhất Mùa Hè 2009

Bước thứ 6: Tạo bản FTEIS cuối cùng và nhận Hồ sơ quyết định Xuân 2010

Bước thứ 7: Văn kiện về Môi trường phần thứ nhì Tùy thuộc vào ngân sách chuẩn chi

CÁC CÂU HỎI ĐÁP THƯỜNG GẠP

H. Tai Sao Nghiên Cứu I-70?

D. Nha MoDOT nhân thấy xa lộ I-70 đã củ và cần cải tiến. Nó là một trong những con đường thương mại và di chuyển huyết mạch của vùng Kansas city vận chuyển hàng chục ngàn người và hàng hóa đến các điểm xung quanh thành phố Kansas city. Nha MoDOT cam kết thực hiện đường hành lang dọc theo xa lô tương lại I-70 vùng Kansas city được suống sé, an toàn và hiệu quả. Để thực hiện điều đó đòi hỏi sự tiến hành dự tính giao thông thông minh mà Văn bản Ảnh hưởng Môi trường phần thứ nhất (FTEIS) là thành phần chính.

H. Kế hoạch có nghĩa là gì?

D. Kế hoạch là những cơ hội tổng quát, cải tiến giao thông cao cấp để giải quyết các vấn đề dọc theo xa lộô 1-70. Kế hoạch có thể gồm nhiều cải tiến đặc biệt như thêm lần xe, sưả lễ đường và cầu hiện hữu, cải tiến đường đốc rẻ, và /hoặc chương trình chuyên chở công cộng.











MoDOT Stays Ahead of the Curve

with I-70 Environmental Study in KC Metro

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MoDOT Está a la delantera de la Curva

con un estudio del ambiente en el área Metropolitana de Kansas City

El Departamento de Transportación de Missouri (MoDOT) está empezando un estudio en la I-70 del Condado De Jakcson. El estudio es la primera parte del Impacto Ambiental (FTEIS) sobre el futuro del proyecto del área metro de Kansas City en la I-70. El estudio se extiende 18 millas desde la I-70 hasta la rampa terminal este de la línea estatal de Missouri y Kansas a solo el este de la I-470 e incluye todo el Distrito Central de Negocios de la Ciudad de Kansas City en la autopista. El proceso de planeamiento se anticipa que este completado con la primera parte del Impacto Ambiental y un Registro de la Decisión.

Visit our blog January 2nd - 31st and post your ideas and comments! Visitar nuestro sitio y publique sus ideas y comentarios en

www.modot.org/kansascity/metroi70

As the project progresses MoDOT will also offer:

- Speakers Bureaus where project staff attend local neighborhood or business group meetings to discuss the project with you and listen to your ideas.
 Contact us to invite us to your meeting.
- MoDOT Mobile Meetings where MoDOT brings its Voice Van and project materials to major community and sporting events in order to seek input from residents and commuters. Dates and times will be posted on the project website.
- A Community Blog for public meeting comments. Post your ideas and comments at: www. modot.org/kansascity/metroi70/

A medida que el proyecto avanza MoDOT también ofrecerá:

- Oficina de Oradores donde el personal del proyecto atenderá al vecindario y negocios locales en reuniones de grupos para discutir el proyecto con usted y sus ideas. Contáctenos para invitarnos a su reunión.
- Reuniones móviles de MoDOT donde MoDOT le lleva a usted su Camioneta de Voz y los materiales de proyecto a la mayoría de la comunidades y eventos deportivos de modo que se obtenga la opinión de los residentes y personas que viajan al trabajo. Las fechas y horas serán publicadas en el sitio de la red del proyecto.
- Un Blog comunitaria para los comentarios públicos de la reuniones. Publique sus ideas y comentarios en: www.modot.org/kansascity/metroi70/



We Want to Hear from You!

The Missouri Department of
Transportation (MoDOT) is conducting
an environmental study of I-70 and has
prepared a series of possible improvement
strategies for it. They will be on display
at the January 6th Listening Post (a.k.a.
open house public meeting) and available for
review and comment on the Internet at www.
modot.org/kansascity/metroi70. You can attend
the Listening Post to comment on the strategies
or visit our website and blog about them.
Displays and summaries from previous public
meetings are also available on our site, along with
an explanation of the planning process, MoDOT
contact information, and much more.



¡Queremos tener noticias de Usted!

El Departamento de Transportación de Missouri (MoDOT) está llevando acabo un estudio ambiental de la I-70 y ha preparando una serie de posibles estrategias de mejoras para la misma. Estos serán expuestos el 6 de enero en el puesto de escucha (también conocido como "Open House"o sesión pública) y disponibles para revisar y comentar en el Internet en www.modot.org/kansascity/metroi70. Usted puede asistir al puesto de escucha para comentar sobre las estrategias o visitar nuestro sitio en la red y la bitácora acerca de estos. Una muestra y resúmenes de las reuniones públicas anteriores también están disponibles en nuestro sitio en la red, junto con una explicación del proceso de planificación, información de contacto de MoDOT y mucho más.



Destyn in the state of the stat

Listening Post Tuesday, January 6, 2009

Poste que Escucha Martes, 6 de enero de 2009

4:00 PM – 7:00 PM St. Paul School of Theology, Holter Center 5123 Truman Road, KC, MO 64127

On-Line Comment

January 2nd - 31st, 2009

Comentario en Línea

2 -31 de enero de 2009

go to / vaya a www.modot.org/kansascity/metroi70



staying ahead of the curve Está a la delantera de la Curva

Step/Paso 1

Collect & Inventory Resource Data Colección e Inventario de los Recursos de información spring / primavera 2008 Step/Paso 2

Update Purpose and Need Actualizar propósito y

summer /verano 2008

necesidad

Step/Paso 3

Determine Initial &

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Determinación Inicial &

Estrategias Razonables

fall /otoño 2008

Step/Paso 4

Recommend a

Preferred Strategy

Recomendar una estrategia

preferida

winter / invierno 2009

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Draft First Tier Environmental Impact Statement

Escribir el borrador de la primera parte de la declaración del impacto ambiental

summer / verano 2009

¿QUÉ PASA?

Step/Paso 6

Final FTEIS & Obtain a ROD

Crear el informe final del FTEIS y obtener el registro de la decisión

winter / invierno 2010

Step/Paso 7

Second Tier Environmental Documents

Segunda parte de los documentos ambientales

upon funding cuando fondos disponibles

WHAT'S HAPPENING?

Questions & Comments? Contact: Project Manager

Allan Zafft 816-622-0687 allan.zafft@modot.mo.gov

visit us at: www.modot.org/ kansascity/metroi70

Write MoDOT at: 600 NE Colbern Road Lee's Summit, MO 64086





Step 3 of the Process FAQs

After gathering input about the Purpose and Need and initial improvement concepts from the community during the late summer, the Study Team began working on Step 3 of the I-70 First Tier Environmental Impact Statement (FTEIS) process. They identified a series of initial strategies that may have the potential for serving the project needs and fulfilling the purpose of the proposed improvements as detailed in the Purpose and Need statement.

The initial strategies are organized into several strategy packages including, but not limited to, the six strategy packages and the one recommended strategy package contained and evaluated in the I-70 Major *Investment Study*, which was completed in 2004. The Team screened and analyzed the initial strategies to identify reasonable strategy packages, including the No-Build Package. In Step 4 the reasonable strategy packages will be analyzed within the draft EIS and further evaluated to determine a preferred strategy. MoDOT will present the reasonable strategies to the community for discussion in December.

Q. What is an Initial Strategy?

A. The initial strategies are combinations of improvement concepts. An initial strategy may include several improvement concepts such as upgrading major interchanges, enhancing bus service along I-70, and adding High Occupancy Vehicle (HOV) lanes. A series of initial strategies were developed and analyzed for this project.

we are here!

Q. What is a Reasonable Strategy?

A. A reasonable strategy is a combination of improvement concepts that have the ability to meet the I-70 First Tier EIS Purpose and Need and also have no serious or fatal flaws in terms of environmental, social, or engineering impacts or costs. The reasonable strategies (also called First Tier Strategies) were developed by screening and analyzing the initial strategies to determine the best options. All of the impacts to the reasonable strategies will be evaluated in the Draft Environmental Impact Statement.

Q. What is a Preferred Strategy?

A. The preferred strategy is the strategy that best addresses the I-70 First Tier EIS Purpose and Need as determined by consideration of transportation, land-use, environmental, social, engineering, and fiscal impacts of each of the reasonable strategies.

Paso 3 del Proceso

Después de reunir información acerca del propósito y necesidad y conceptos iniciales para el mejoramiento de la comunidad durante finales de verano, el equipo de estudio comenzó a trabajar en el paso 3 de la I-70 del proceso de la primera parte de la declaración del impacto ambiental. Ellos identificaron una serie de estrategias iniciales que podrían tener el potencial para servir a las necesidades del proyecto y cumplir el propósito de la propuesta de mejoras según se detalla en la declaración de Propósito y Necesidad.

Las estrategias iniciales son organizadas en diversos paquetes de estrategias incluyendo pero no limitadas a, los seis paquetes de estrategia y el paquete de estrategia recomendado que su contenido y evaluación se encuentran en el *Estudio de Mayor Inversión de la I-70*, el cual fue completado en el 2004. El equipo investigo y analizo las estrategias iniciales para identificar paquetes de estrategia razonables, incluyendo paquetes de no desarrollo o "No-Building Package". En el paso 4, los paquetes de estrategia razonables, serán analizados dentro de el borrador de la Declaración de Impacto Ambiental o en ingles "EIS" y serán más evaluados para determinar la estrategia seleccionada. MoDOI presentara las estrategias razonables a la comunidad para ser discutidas en diciembre.

Preguntas

P. ¿Qué es una estrategia inicial?

C. Las estrategias iniciales son combinaciones de conceptos para el mejoramiento. Una estrategia inicial podría incluir varios conceptos para el mejoramiento tales como modernizando los mayores cruces, ampliando los servicios de autobús a lo largo de la I-70 y añadiendo una alta acumulación de vehículos y los carriles. Una serie de estrategias iniciales fueron desarrolladas y analizadas para este proyecto.

P. ¿Qué es una estrategia razonable?

C. Una estrategia razonable es una. combinación de conceptos para el mejoramiento que tienen la habilidad de cumplir con los propósitos y necesidades de el borrador de la primera parte de la Declaración de Impacto Ambiental y también no tiene fallos serios o fatales en términos ambientales, sociales o impactos de ingeniería o costos. Las estrategias razonables (también conocidas como La Primera Declaración de Estrategias) fueron desarrolladas bajo investigación y analizando las estrategias iniciales para determinar las mejores opciones. Todos los impactos para las estrategias

razonables serán evaluados en el borrador de la Declaración de Impacto Ambiental.

P. ¿Qué es una estrategia preferida?

C. La estrategia preferida es la estrategia que mejor se refiere a los propósitos y necesidades del borrador de la primera parte de la Declaración de Impacto. Ambiental como se determino por la consideración de transportación, uso de terrenos, ambiente, social, ingeniería e impactos físicos de cada una de las estrategias razonables.

¿Preguntas y Comentarios? **Contacto:** Gerente de Proyecto

Allan Zafft 816-622-0687 allan.zafft@modot.mo.gov

visítenos en: www.modot. org/kansascity/metroi70

Escriba a MoDOT al: 600 NE Colbern Road Lee's Summit, MO 64086

MoDOT Stays Ahead of the Curve

with I-70 Environmental Study in KC Metro

The Missouri Department of Transportation (MoDOT) is conducting an environmental study of I-70 in Jackson County. The study is a First Tier Environmental Impact Statement (FTEIS) for the Future I-70 Kansas City Metro project. It spans 18 miles of I-70 from the last ramp termini east of the Missouri – Kansas state line to just east of I-470 and includes all of the Downtown Kansas City Central Business District Freeway Loop. The planning process is anticipated to be completed in 2010 with the Final First Tier Environmental Impact Statement and Record of Decision.

Visit our blog January 2nd - 31st and post your ideas and comments! www.modot.org/kansascity/metroi70

Nha MoDOT ở phần trên của đồ biểu chuẩn với bản nghiên cứu môi trường xa lộ I-70 vùng KC

Nha Giao Thông Vận Chuyển Bang Missouri (MoDOT) đang hướng dấn nghiên cứu môi trường xa lộ I-70 thuộc quận Jackson. Sự nghiên cứu là Phần đầu của Văn Bản Ảnh hưởng Môi Trường (FTEIS) của công trình cho tương lai xa lộ I-70 vùng Kansas City. Công trình kéo dài 18 dậm từ dốc rẻ cuối cùng phía đông đường ranh tiểu bang Missouri và Kansas đến phía đông xa lộ I-470 và bao gồm tất cả xa lộ bao vòng Khu thương mại khu phố Kansas City. Chương trình dự trù sẽ hoàn tất năm 2010 với văn bản cuối cùng của Phần đầu của văn bản ảnh bưởng Môi trường và Hồ sơ Quyết định.

Viếng trang điện thư của chúng tôi (blogs) từ ngày 2 đến 31 tháng 1, 2009 và ghi ý kiến và những phê bình của bạn!

www.modot.org/kansascity/metroi70

As the project progresses MoDOT will also offer:

- Speakers Bureaus where project staff attend local neighborhood or business group meetings to discuss the project with you and listen to your ideas.
 Contact us to invite us to your meeting.
- MoDOT Mobile Meetings where MoDOT brings its Voice Van and project materials to major community and sporting events in order to seek input from residents and commuters. Dates and times will be posted on the project website.
- A Community Blog for public meeting comments. Post your ideas and comments at: www. modot.org/kansascity/metroi70/

Trong khi công trình đang tiết hành, Nha MoDOT để nghị:

- Phòng Phát Ngôn, nơi mà các quan chức thuộc chương trình tham dự những buổi họp của láng giếng địa phương và các nhóm kinh doanh để bàn thảo chương trình với bạn và láng nghe ý kiến bạn.
- Các cuộc họp Lưu Động của Nha MoDOT, nơi đây Nha MoDOT mang xe Phát thanh và các tài liệu đến các khu cộng đồng chính và các buổi thể thao để thu nhận ý kiến của dân cư và người quá cảnh. Ngày, giờ sẽ được ghi trên mạng của công trình.
- Trang Điện thư Cộng đồng (Blogs) dành cho ý kiến buổi họp.
 Ghi ý kiến và phê bình của bạn ở địa chỉ mạng www.
 modot.org/kansascity/metroi70/





We Want to Hear from You!

The Missouri Department of
Transportation (MoDOT) is conducting
an environmental study of I-70 and has
prepared a series of possible improvement
strategies for it. They will be on display
at the January 6th Listening Post (a.k.a.
open house public meeting) and available for
review and comment on the Internet at www.
modot.org/kansascity/metroi70. You can attend
the Listening Post to comment on the strategies
or visit our website and blog about them.
Displays and summaries from previous public
meetings are also available on our site, along with
an explanation of the planning process, MoDOT
contact information, and much more.

Chúng Tôi Muốn Nghe Từ Các Bạn!

Nha Giao Thông Vận Chuyển Tiểu bang Missouri (MoDOT) đang hướng dẩn nghiên cứu môi trường xa lộ I-70 và đã chuẩn bị nhiều phương cách cải tiến khả thi cho chương trình. Các phương án nằy sẽ được trưng bày ại Trạm Nghe Tin vào ngày 6 tháng Giêng 2009 (được biết như buổi họp công chúng tự do) và sản sàng để xét duyệt và phê bình trên mạng tại địa chỉ www. modot.org/kansascity/metroi70. Bạn có thể tham dự ở Trạm Nghe Tin để phê bình về các phương án hoặc viếng trang mạng của chúng tôi và trang thư (blog) về vấn đề nầy. Những trưng bày và các tóm lược các buổi họp công chúng trước cũng sắn sàng trên trang mạng của chúng tôi, cùng với giải thích về tiến trình, chỉ dẩn liên lạc Nha MoDOT, và nhiều nữa.

Listening Post Tuesday, January 6, 2009

Trạm Nghe Tin

Thứ Ba, ngày 6 tháng 1, 2009

4:00 PM – 7:00 PM St. Paul School of Theology, Holter Center 5123 Truman Road, KC, MO 64127







On-Line Comment January 2nd - 31st, 2009

Phê Bình Trên Mạng

Tháng 1, từ ngày 2 đến 31, 2009

go to / Vào địa chỉ mạng www.modot.org/kansascity/metroi70

staying ahead of the curve đi trước biểu đồ chuẩn

Step/budc 1

Collect & Inventory Resource Data Tập họp &thu lượm tiềm năng dữ kiện spring / Xuân 2008

Step/butôc 2

Update Purpose and Need Cập nhật mục đích và nhu cầu

summer /'Hè 2008

Step/budc3

Determine Initial & Reasonable Strategies

Xác định phương cách

khởi đầu và hữu lý

fall / Thu 2008

Step/butôc4

Recommend a

Preferred Strategy

Để nghi phương

winter / Đông 2009

cách được chon

Step/but&c5

Draft First Tier Environmental Impact Statement

Soạn thảo phần đầu bản văn ảnh hưởng môi trường

summer / Hè 2009

Step/budc6

Final FTEIS & Obtain a ROD Bån FTEIS và nhận bản ROD

winter / Đông 2010

Step/budc7

Second Tier Environmental Documents Phần thứ nhì của bản môi trường

WHAT'S HAPPENING?

Questions & Comments? Contact: Project Manager

Allan Zafft 816-622-0687 allan.zafft@modot.mo.gov

visit us at: www.modot.org/ kansascity/metroi70

Write MoDOT at: 600 NE Colbern Road Lee's Summit, MO 64086





Step 3 of the Process FAQs

After gathering input about the Purpose and Need and initial improvement concepts from the community during the late summer, the Study Team began working on Step 3 of the I-70 First Tier Environmental Impact Statement (FTEIS) process. They identified a series of initial strategies that may have the potential for serving the project needs and fulfilling the purpose of the proposed improvements as detailed in the Purpose and Need statement.

The initial strategies are organized into several strategy packages including, but not limited to, the six strategy packages and the one recommended strategy package contained and evaluated in the *I-70 Major Investment Study*, which was completed in 2004. The Team screened and analyzed the initial strategies to identify reasonable strategy packages, including the No-Build Package. In Step 4 the reasonable strategy packages will be analyzed within the draft EIS and further evaluated to determine a preferred strategy. MoDOT will present the reasonable strategies to the community for discussion in December.

Q. What is an Initial Strategy?

A. The initial strategies are combinations of improvement concepts. An initial strategy may include several improvement concepts such as upgrading major interchanges, enhancing bus service along I-70, and adding High Occupancy Vehicle (HOV) lanes. A series of initial strategies were developed and analyzed for this project.

we are here!

Q. What is a Reasonable Strategy?

A. A reasonable strategy is a combination of improvement concepts that have the ability to meet the I-70 First Tier EIS Purpose and Need and also have no serious or fatal flaws in terms of environmental, social, or engineering impacts or costs. The reasonable strategies (also called First Tier Strategies) were developed by screening and analyzing the initial strategies to determine the best options. All of the impacts to the reasonable strategies will be evaluated in the Draft Environmental Impact Statement.

Q. What is a Preferred Strategy?

A. The preferred strategy is the strategy that best addresses the I-70 First Tier EIS Purpose and Need as determined by consideration of transportation, land-use, environmental, social, engineering, and fiscal impacts of each of the reasonable strategies.

CÁI GÌ ĐANG XẢY RA?

Bước ba của Tiến Trình

Sau khi thu lượm những ý kiến về Mục đích và Nhu cầu và các ý tưởng cải tiến đầu tiên từ cộng đồng vào cuối mùa hè, ban Nghiên cứu bất đầu thực hiện Bước thứ 3 của tiến trình văn bản Ánh Hưởng Môi trường Phần thứ nhất của xa lộ I-70 (FTEIS). Ho tìm phiều phương án khởi đầu có tiềm năng đáp ứng các nhu cầu của chương trình và thỏa mản mục đích của các cải tiến để nghi như chi tiết trong văn bản Muc đích và Nhu cầu.

Những Phương án khởi đầu được sắp xếp thành nhiều gói phương án gồm cả, nhưng không giới hạn, sấu gói phương án và một gói phương án được để nghị được chứa và thẩm định trong Bản Nghiên cứu đầu tư chánh, đã được hòan tất trong năm 2004. Nhóm đã sản lọc và phân tích các phương án khởi đầu để nhận diện các gói phương án hữu lý gồm cả gói Không xây dựng. Ở bước 4 các gói phương án hữu lý sẽ được phân tích ở bản thảo EIS và phân tích thêm để quyết định phương án được chọn. Nha MoDOT sẽ giới thiệu những phương án hữu lý đến cộng đồng để thảo luận vào tháng Mười hai.

Các Câu hỏi, Trả lời thường gặp

Hỏi. Phương án khởi đầu là gì?

Đáp. Các phương án khởi đầu là tổng họp các tư tưởng cải tiến. Phương án khởi đầu có thể gồm nhiều tư tưởng cải tiến như nâng cấp các giao điểm chính, phong phú hóa dịch vụ xe Bút dọc theo xa lộ I-70, và thêm nhiều lần xe cho Xe nhiều chổ ngồi (HOV). Nhiều phương án khởi đầu được triển khai và phân tích cho chương trình nây.

Hỏi. Phương án hữu lý là thế nào?

Đáp. Phương án hữu lý là tấp họp các tư tưởng cải tiến có khả năng thỏa mản trong phần đầu EIS của xa lộ I-70 về Mục đích và Nhu cầu và cũng không có những nhược điểm rằm trọng hoặc chết người về môi trường Xả hội, hoặc ảnh hưởng kỷ thuật hoặc giá cả. Những phương án hữu ly (cũng được gọi là Phần đầu của phương án) được phát triển bởi sàng lọc và phân tách những phương án khởi đầu để quyết định sư chọn lưa tốt nhất. Tất cả những ảnh hưởng đến những phương án hữu lý sẽ được thẩm định trong văn bản thảo về Ánh hưởng Môi trường.

Hỏi. Phương án được chọn là gì?

Đáp. Phương án được chọn là phương án được trình bày tốt nhất trong Phần đầu thuộc xa lô I-70 về Mục đích và Nhụ cầu của EIS được xác định bởi vận chuyển, lần xe dùng, môi trường, xã hội, kỷ thuật, và tài chánh của mối phương án hữu lý.





Giám Đốc Chương Trình

Allan Zafft 816-622-0687 allan.zafft@modot.mo.gov

MoDOT 600 NE Colbern Road Lee's Summit, MO 64086

Để biết thêm chi tiết viếng: www.modot.org/kansascity/ metroi70

two/dos

three/tres

Appendix E.6 Public Meeting Summaries					

I-70 FTEIS

Pre-Location Meeting Summary

September 2008

OVERVIEW

The Missouri Department of Transportation (MoDOT) has begun an environmental study of I-70 on the Missouri side of the Kansas City Metropolitan Area. The study is a First Tier Environmental Impact Statement (FTEIS) for the future I-70 Kansas City Metro project. The study will end in 2010. It spans 18 miles of I-70 from the last ramp termini east of the Missouri – Kansas state line to just east of I-470 and includes all of the Downtown Kansas City Central Business District Freeway Loop.

MoDOT held two large public meetings for the study:

- September 9, 2008 from 4-7PM at St. Paul School of Theology, Holter Center, 5123 Truman Road, Kansas City, Missouri.
- September 11, 2008 from 4-7PM at Truman High School, Cafeteria, 3301 S. Noland Road, Independence, Missouri.

The meetings were formatted as open houses, so participants were welcome to come and go as desired through the length of the 3-hour meetings. No formal presentations were given. The following exhibits were on display for review and comment:

- Welcome
- From Idea to Reality The overall process for a transportation project
- FTEIS Schedule and Process
- Study Area Map
- Existing Traffic Both directions on an average day
- Purpose and Need Map
- Environmental Constraints Map
- What is a Concept and a Strategy
- No Build Concept
- Improve Bottlenecks Concepts
- Concepts that Change Capacity
- Specialty Managed Lanes Concepts
- Evaluation of Strategies
- Getting Involved
- Other MoDOT Projects in the Kansas City Area

Meeting participants received a project status handout and a comment card that included four questions as they signed into the meeting:

- What are the problems in the Corridor?
- What needs to be fixed and how would you fix it?
- How does the corridor affect your everyday life?
- Other Comments?

Over 8,400 newsletters were mailed to I-70 property owners and 308 fliers were mailed to umbrellas organizations, agencies, businesses, and public officials inviting them to attend the meetings. Combined, 54 people attended. Generally their comments related to:

- Noise/sound walls
- Additional lanes
- Traffic congestion
- Entrance and exit ramp lengths
- Light rail/multi-modal transportation

Specific comments are included below by meeting date.

COMMENTS: SEPTEMBER 9, 2008 MEETING AT ST. PAUL SCHOOL OF THEOLOGY

• 24 people attended the meeting and 11 comment cards were received. Verbatim comment card comments include (person's name excluded):

Q. What are the problems in the corridor?

- A. Only one method of transit...cars. The North Loop forms a barrier between downtown and river market. The South Loop forms a barrier between downtown and the crossroads. Air pollution which impacts the safety and health nearby residents is horrendous. The residents in the city are bearing the brunt of suburban commuters.
- A. Traffic moves too slow. It's very noisy & we have no privacy. We are so close to the highway now, we have a major noise problem. Crime is also high and we hear the emergency equipment go by all the time. When traffic is backed up I can't even cook in the kitchen because people can see in our windows. We keep them closed at all times. Homes should not be allowed so close to the highways. I agree that I-70 should be widened to get the flow going. Yes!
- A. Benton Curve poses problems from the standpoints of degree & turn (turns too quick). Also very treacherous in winter weather.
- A. There is bumper to bumper traffic mornings and evenings to and from downtown KC.

- A. Congestion problems—widen area and provide conservational touch (trees, flowers, bushes, etc.) to beautiful and absorb some of the pollution.
- A. Too much traffic for the road. Wasn't meant to handle all the traffic it carries. Heavy vehicles tear up the pavement. Should have been a cross over from one side to the other when originally built. 29th and Oakley.
- A. Back-up between 3p-6p M-F
- A. That there's only one highway going east and there should be more than one east west highway.
- A. Interested in any access to 40 hwy—I-70—435. Signed, Kevin Sleyster.
- A. Traffic going east from downtown is basically a parking lot. Widen I-70 from 3 lanes to 6 lanes in each direction.
- A. My main concern is with the short on/off ramps that serve as both on/off ramp at the same time.
- A. Problems in the corridor are not enough lanes. Lanes need to widen to 5 lanes. On and exit ramps are too short, need to lengthen. Jackson Curve is very dangerous.

Q. What needs to be fixed and how would you fix it?

- A. Cap the South Loop. Get rid of the North Loop. Add Massive tree buffers to filter pollutants from adjacent neighborhoods. Get rail transit in the corridor (see I-25 in Denver T-REX project). Stop perpetuating suburban and exurban sprawl.
- A. For ½ diamond curve, it's preferable to see a more graduated curve.
- A. I would recommend light rail where one could park their cars in Independence, Overland Park, N. Kansas City. Connections and agreement would need to be worked with the railroad as light rail could go to Union Station and buses from there to downtown and other connections.
- A. Replace road bed with mixture of old tires to give road more give and wouldn't tear up or wear out so easily. If you build a new road put in a bridge crossing, over I-70 at 29th and Oakley area.
- A. Improved maintenance.
- A. The reverse highway is a really good idea.
- A. Need to fix the on and off exit 7A. I-70 & 40 Hwy for future development. Signed, Kevin Sleyster.
- A. Funding or no funding I-70 needs fixed from 435 west (Legends) to St. Louis.
- A. Reduce the number of on/off ramps especially in the north loop so that some ramps can be longer and serve a single purpose.
- A. Short entrance ramp make traffic merging difficult and at times unsafe. The I-70 w/I-435 exit from Delaware/Independence ramp is an example of such a ramp. Getting to I-70 w is at times dangerous, requiring you to come to a full stop at the end of the ramp and then dart across lanes to arrive in the correct left most lane.
- A. It's simple. Buy up property and spend some money. Get I-70 up graded for the safety of Kansas Citians. It's long overdue.

O. How does the corridor affect your everyday life?

- A. I have to breathe in the pollutants emitted from suburban commuters which enhances my risk of asthma. I find it hard to walk from my residence at 8th and Broadway to the River Market and Crossroads because of the North and South Loop.
- A. Sometimes it takes a long time to get home after work because of the slowness. And if there is an accident, forget a decent time to arrive home. Everyone I work with hates the I-70 drive home. Especially the Benton Curve.
- A. I do not drive I-70 through rush hour—not necessary. Not affected by it. I-70 makes connections east to 435, Hwy 291 and west connection—problem occurs downtown with connection to I-35 and to intercity bridge and north across Paseo bridge or connections north.
- A. Shopping, getting out of town to points east.
- A. It is behind my house.
- A. Not Much. I only travel if I am going to KS or Eastern Jackson County.
- A. I walk to work, so the corridors effect on my life is mainly due to the noise I encounter while walking over it. On the weekend, however, I drive along I-70 frequently and do experience the challenges then.
- A. It's a nightmare all the way to Indep., Blue Springs. Back to back traffic every day. Stand stills. Traffic. Road rage.

Q. Other Comments?

- A. Build a highway for the 21st Century and beyond. Fix the mistakes of the original highway network which sacrificed sustainable urban living for unsustainable suburban sprawl. Make the highway multi-modal...Give people different options for transit. Increase MoDOT's funding of mass-transit, decrease funding for roads. PUT A TOLL ROAD FROM I-470 TO DOWNTOWN. TAX THE SUBURBANITES WHO WANT TO COMMUTE 50+ MILES PER DAY.
- A. Thanks for listening. It's a constant battle Monday-Friday.
- A. Light rail worked in Sacramento CA. Could be used as a guide for Kansas City. I-70 East past Marshall, MO is a mess. Worn out and into St. Louis, disastrous. A tunnel proposed is a joke and to me one way traffic and separate lanes for bus and 4 riders. Tried in California and failed. A subway in LA was built no exists, etc. I-70 is more flat in Missouri and rails could be built along the present I-70.
- A. Keep up the good work—& remember safety 1st. Provide more camera and solar powered lighting to save on energy!
- A. Prepare for increased rapid transit.
- A. There needs to be another way to go east or toll lanes for faster travel.
- A. It's about time.
- A. If the north and south loop could be covered, converting the space into a park or some other community feature, you would have my vote!

A. Why has it taken MoDOT and other city members to start making plans to do something about the I-70 corridor? Stop worrying about money. Just get it down.

• Staff Notes

- o Support for truck lanes—need thicker truck pavement.
 - ✓ 3 cars for cars, 3 trucks for trucks and rebuild existing.
- o Would like to see recycled asphalt used.
- o Don't like elevated lanes.
- o Like tunnel and reversible lanes—reversible lanes wouldn't cost too much.
- One way loop would probably work.
- Thinks light rail would work.
- o Lived in Chicago—used reversible lanes—it helps, one of the better ideas, limit exits within them—I-90 did this—the better option with good signage.
- o On I-70 everyday congestion comes and goes.
- Concern over long term road condition.

COMMENTS: SEPTEMBER 11, 2008 MEETING AT TRUMAN HIGH SCHOOL

• 31 people attended the meeting and 12 comment cards were received. Verbatim comment card comments include (person's name excluded):

Q. What are the problems in the corridor?

- A. Entering and exiting alone I 70 are too short and cross traffic at 470/I 70 Benton Curve too sharp. And info for lane change to short notice.
- A. Benton Curve is biggest problem. We need the tunnel.
- A. Noise abatement by traffic and "No Jake Break Signs" (Especially on the Crysler Bridge where the drivers start to let her loose)! Signed, Bill Baker.
- A. Region wide issues. More capacity needed. Alternatives to adding lanes.
- A. Noise and level drainage—from west and east a 12 mile marker. Come across our yard washing gravel away. Signed, John Paris.
- A. Speed—decrease noise and wrecks with lower speed.
- A. Lane reductions at 435 interchange clogs rush hour commutes. High level of noise for homes facing the highway. High level of traffic use.
- A. The speed limit should be lower. It would decrease noise and lower the number of wrecks.
- A. Extra entrance/exit lane. I-70 EB in between Lee's Summit Rd and 291 always a problem with everyone wanting to be in the right lane to get on 291 and people trying to get on the highway from Lee's Summit Rd EB.
- A. The biggest problem is noise. I-70 as it now stands can handle the traffic.

Q. What needs to be fixed and how would you fix it?

- A. TDM. Alternative work hours. Ride-sharing. Carpool lanes. Light rail throughout metro area. Design issues. Cloverleaf interchange design outdated at I-470. I-435 interchange also needs to be modernized ie flyovers etch. Longer weave areas would help with interchanges.
- A. Build up grown so water will go east not across our yard. Signed, John Paris.
- A. Added lanes. The reversible lane is a viable suggestion. Barrier walls to reduce the noise.
- A. Make 3 lanes that go under 435 eastbound and westbound. Consider rush hour by using a lane from direction it is going like St. Louis. Do not put red lights on ramps.
- A. I would build longer and wider entrance and exit ramps at the stadium. I would put in reversible lanes. This would cut down on the wrecks.
- A. Redesign of 40/Sterling Exit (I-70 WB). Very dangerous merging with traffic coming from Blue Ridge as well. Straighten out the curves heading downtown to reduce speed restrictions.
- A. Sound barriers on both sides. Do not add any additional lanes.

Q. How does the corridor affect your everyday life?

- A. When we built our home 50 plus years ago, I-70 was a "corn-field." My builder and I were both informed that the long hill behind my location would be "cut thru" and all I would be seeing is the tops of some semis. As a former Independence City Councilman, I know that there were federal dollars too. Signed, Bill Baker.
- A. Noise and can get yard dry so can mow it. Signed, John Paris.
- A. Noise.
- A. Home sits along I-70 and the noise level is annoying to the point it affects volume levels of TV and recreational use of backyard.
- A. It is so loud during rush hour, we dare not open the windows. There are $1\frac{1}{2}$ blocks north of I-70 on Rittman Rd.
- A. Noise. We live next to I-70 and we cannot use our backyard. Primary noise is from large trucks and additional lanes were only make the noise problem worse.

O. Other Comments?

- A. Better access to Power and Light from Eastern Jackson County.
- A. Build sound barriers—neighbors and I attended a meeting down by the plaza years ago and were not allowed to express or comments or feelings. Not a good night. So what's the latest on sound barriers so I can report back to neighbors? Thank you, Bill Baker. 12904 E 41st Terrace (Just East of the Crysler Bridge). (Comment Suggest not show person's name regarding the version of the meeting summary shown to the public.) Signed, Bill Baker.

- A. Believe a light rail/commuter train would be popular and heavily used. Would love to see this happen parallel to I-70 to Blue Springs and North to Airport.
- A. Thanks for explaining things so well—it is a relief to know <u>exactly</u> how this process works. A big relief for us!!!
- A. The disintegrating rubber tires contribute to toxic air.
- A. I think the Highway Department should work with county assessors for lower tax assessed value of property next to the highway. This would give some relief to property owners.

Staff Notes

- o Need 3 lanes under I-435, now just 2.
- Accidents in the straight part between Blue Ridge Cutoff and Sterling or any straight part.
- o Weird going in loop from I-70 w to 29/35N.
- o Accidents (sirens) when there's a ball game.
- o Straighten out I-70 between downtown to I-435.
- o Straighten out curves and allow faster speeds for through traffic.
- o Need better signage to help people go east on I-70 from the west side of the loop (Sign needs to say that you can stay in the right lane).
- o Would like to see flyover ramps to I-470 from I-70.
- Like reversible lanes-work elsewhere.
- 12 Mile marker—new warning sign coming across back fence to read the meter—message board is in their backyard.
- o Also have drainage problem related to freeway runoff and erosion.
- o Flyovers at I-435—a key issue.
- o Part of major congestion is ongoing construction on the road.
- o 15 miles on I-70 to Kansas side sometimes takes 45 minutes to an hour—often construction is a factor.
- o Big fan of cloverleaf except some on I-470/70.
- o Dust is a concern close to freeway system in addition to noise.
- Tires, shocks—car damage due to maintenance issues—road litter, metal, tires etc causing damage.
- Car pool lanes.
- Need to reduce drivers.
- No experience with HOT/HOV lanes—don't know if we need something like that.
- o Do not normally have much trouble with I-70 traffic. Mainly go from Lee's Summit to the airport.
- o In favor of maintain and perhaps add a lane.
- Stick to the basics.
- o Concerned with widening—lives 5 houses away and says it is very noisy—gotten more so in the last 30 years—doesn't want road widened.

- o Need flyover eastbound to southbound 470—70 people don't yield the right of way.
- Problem with drainage to north from original construction of center lane—need to present in any future construction.
- Noise bad and vibrations.
- o Noise on hills—"Jake Breaks".
- o What happened to money for sound barriers between Noland and 40 HWY?

I-70 FTEIS Community Coffee Summary

September 2008

OVERVIEW

The Missouri Department of Transportation (MoDOT) has begun an environmental study of I-70 on the Missouri side of the Kansas City Metropolitan Area. The study is a First Tier Environmental Impact Statement (FTEIS) for the future I-70 Kansas City Metro project. The study will end in 2010. It spans 18 miles of I-70 from the last ramp termini east of the Missouri – Kansas state line to just east of I-470 and includes all of the Downtown Kansas City Central Business District Freeway Loop.

MoDOT held two Saturday Coffee meetings for the study:

- September 13, 2008 from 9-11AM at Central High School, 3221 Indiana Ave, Kansas City, Missouri.
- September 27, 2008 from 9-11AM at Don Bosco Center, 580 Campbell St, Kansas City, Missouri

The informational meetings were identical to the pre-location meetings held September 9th and 11th. The following exhibits were on display for review and comment:

- Welcome
- From Idea to Reality The overall process for a transportation project
- FTEIS Schedule and Process
- Study Area Map
- Existing Traffic Both directions on an average day
- Purpose and Need Map
- Environmental Constraints Map
- What is a Concept and a Strategy
- No Build Concept
- Improve Bottlenecks Concepts
- Concepts that Change Capacity
- Specialty Managed Lanes Concepts
- Evaluation of Strategies
- Getting Involved
- Other MoDOT Projects in the Kansas City Area

Meeting participants received a project status handout and a comment card that included four questions as they signed into the meeting:

- What are the problems in the Corridor?
- What needs to be fixed and how would you fix it?
- How does the corridor affect your everyday life?
- Other Comments?

Over 2,700 postcards were mailed to I-70 property owners and 308 fliers were mailed to umbrellas organizations, agencies, businesses, and public officials inviting them to attend the meetings. 11 people attended the Coffees. Generally their comments related to:

- Benton Curve.
- Downtown Loop access and traffic.
- High Occupancy Vehicle provisions.
- Transportation options, particularly transit (rail and bus), bicycle, and pedestrian.

Specific comments are included below by meeting date.

COMMENTS: SEPTEMBER 13, 2008 COMMUNITY COFFEE MEETING

• 6 people attended the meeting and 1 comment card was received. Verbatim comment card comments include (person's name excluded):

Q. What are the problems in the corridor?

A. Too much traffic. We need to provide alternative modes of transportation (ie rail, bus, bike) to users. We need to decrease the need for people to travel long distances or at least eliminate local users from wanting to get on I-70.

Q. What needs to be fixed and how would you fix it?

A. Provide alternative modes of transportation and make it more attractive to travel short distances in their local community without creating the need to use I-70.

Q. How does the corridor affect your everyday life?

A. I sometimes take my car to downtown on I-35 towards the downtown loops. Sometimes there is a lot of traffic. If there would be viable alternatives I would take them.

O. Other Comments?

A. Please consider the high cost of fuel (gasoline, electricity) and the projected cost of fuel in the next 20 years.

• Staff Notes

- o Likes options for tunnels—like I-35 in Duluth with park on top.
- o Likes options for reducing lanes/parkways.
- o Likes one way downtown loop.
- Likes alternative transportation options—more light rail than BRT—views as ideal corridor for that.
- o Consider transportation technology and its effects.
- Concern about particulate matter in the neighborhoods near the curves—have we done
 the PM readings—wants to see trees/scrubbers—likely because of latex and railroad.
- o UMKC has done a study—Get it from them.
- Concern over jobs—Looking over positive impacts—Link to project like kcICON.
- o Curves are deadly—Benton/Jackson.
- o Makes sense to straighten out. Would take out historic homes in African American community. This is the area SW of I-70.
- o Can you put light rail down the middle for this design.
 - ✓ Don't know about usage if only built to I-435.
 - ✓ Rail to connect better shopping opportunities/employment.
- o In creating new highway—Will study look at economics?
- Need to invent something to put city and state on the map.
- o Take the extra lane and reverse them—like reversible lane with gate.
- Does not like toll lanes.

COMMENTS: SEPTEMBER 27, 2008 COMMUNITY COFFEE MEETING

• 5 people attended the meeting and 4 comment cards were received. Verbatim comment card comments include (person's name excluded):

Q. What are the problems in the corridor?

- A. Not enough transportation options available. Need welcoming bike/ped accommodation on intersecting roads.
- A. I don't see any major problems.
- A. Not enough lanes, lane switching, no on-ramp at I-70 and Benton at 13th Street gong east. No south bound on-ramp from I-70 to Bruce Watkins. Signed, Lee Lambert.

Q. What needs to be fixed and how would you fix it?

- A. Fix bike/ped access under overpasses and on roads/bridges that cross I-70 make sure there are crosswalks/bike lanes across on/off ramps or otherwise safe passage.
- A. The on-going ramp to I-70 needs to be wider and easier access to I-70.
- A. On and off ramps too close together, also see above. Signed, Lee Lambert

Q. How does the corridor affect your everyday life?

- A. Separates downtown and neighborhoods, makes a barrier like a river.
- A. It's what we use to go to Wal-Mart and easier to use. Needs to be wider because of traffic lanes during stadium events.
- A. It takes me to my doctor in Kansas, to my son's house near the stadium, and to my daughters houses in Kansas and Columbia. I use it almost as much as side streets. Signed, Lee Lambert.

Q. Other Comments?

- A. Prefer HOV/HOT lanes, more transit options. No extra lanes unless for balance. Safe comfortable bike/ped on intersecting roads. Reduce lanes as needed.
- A. I think everything has been thought of and the concept has been thought of to indicate concern for the citizens in _____ neighborhood.
- A. Rather than HOV/HOT lanes, manage all lanes for high occupancy priority HOV free/SOV toll during peak period. Look at I-70 corridor for rail connection between Rock Island line at Blue River and KCT line at 18th/Truman. Revisit travel demand forecasts in light of rising motor fuel prices and climate change (including implications of policy/regulatory measures adopted to address climate change).
- A. One map showed a hazardous waste site in the 12000 block of Benton. What is it? Could I get more info? Signed, Lee Lambert.

Staff Notes

- o Extremely dangerous going from I-70 west to the Admiral exit.
 - ✓ Speed is 45 mph but everyone's going faster.
 - ✓ Have to cross south loop traffic, east loop traffic, and north 71 Highway traffic (difficult, dangerous) Have to find a hole in the traffic and dive in I'm an aggressive driver and it scares me.
- o 23rd, 27th, and 18th Streets really bad short on-off ramps where people don't yield.
- Getting on at Truman/Prospect is also difficult confusing easy to miss stop signs.
- o Issues of 2 lanes merging to one in the loop.
- Can see down grading north loop to parkway but the rest is travelled too much would need another way to move cars, trucks, buses through.
- o Missouri was one of the worst highways traveling to New York State.
- o Interested in what the hazardous site is at Benton north of I-70.
- o Flood issues on Benton Curve pavement on major rain once this year on westbound side down to one lane in previous years whole westbound section flooded.
- o Buses need to go where people want to go.
- Re-designate south leg of I-70 and make north leg I-670.
- o North and south leg downtown cover/better bike/ped facilities.
- Access across I-70.
- Complete street design.

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70 FTEIS Saturday Coffee Meeting Summary – September 2008					

I-70 FTEIS MoDOT Mobile Meeting

December 14, 2008

OVERVIEW

As part of the planning process for the I-70 First Tier Environmental Impact Statement (FTEIS), the Missouri Department of Transportation (MoDOT) prepared a series of possible improvement strategies for I-70. The strategies were put on display for public review and comment during a December 14, 2008 Mobile Meeting at Arrowhead Stadium. MoDOT stationed its Voice Van, tent, and exhibits in the parking lot on the east side of the stadium and staff distributed the project business card to sports fans as they crossed the lot on the way into the stadium. Approximately 2,500 cards were distributed that directed individuals to the project web site. Patrons were encouraged to stop by the Voice Van to talk with MoDOT staff and to review the following exhibits:

- Purpose and Need
- From Idea to Reality The overall process for a transportation project
- FTEIS Schedule
- 4 Strategy Packages
 - o No-Build
 - o Fix Key Bottlenecks
 - o Add General Lane Capacity
 - o Fix Key Bottlenecks plus Transportation Improvement Corridor
- Getting Involved Project Contact Information

The meeting gave MoDOT the opportunity to gain input from residents and commuters about the project by going directly to them rather than scheduling a traditional public meeting. More mobile meetings are planned for the future. Feedback from the December 14th mobile meeting related to:

- Widening I-70 to 12-lanes 6 in each direction.
- Removing dangerous drivers from the road.
- The state of Missouri having more miles of highway than any other state in the country.
- Support for the use of buses over light rail as an alternative form of transportation because of the number of roadways available in the Kansas City area.
- Elimination of tolls (likely comments from Kansas drivers).
- Do not support HOV lanes.

The comments gathered were collected verbally from sports fans. They do not represent verbatim comment card responses.

I-70 FTEIS MoDOT Listening Post & On-Line Public Meeting

January 2009

OVERVIEW

The Missouri Department of Transportation (MoDOT) has begun an environmental study of I-70 on the Missouri side of the Kansas City Metropolitan Area. The study is a First Tier Environmental Impact Statement (FTEIS) for the future I-70 Kansas City Metro project. The study will end in 2010. It spans 18 miles of I-70 from the last ramp termini east of the Missouri – Kansas state line to just east of I-470 and includes all of the Downtown Kansas City Central Business District Freeway Loop. As part of the FTEIS planning process, the study team prepared a series of possible improvement strategies for I-70 and presented them for public review and comment during January 2009.

FORMAT AND EXHIBITS

The I-70 improvement strategies were posted on the project website for public review and comment from January 2nd to January 31st as part of an on-line public meeting. The information was also presented at the January 6, 2009 Listening Post (a.k.a. open house public meeting) at the St. Paul School of Theology's Holter Center (5123 East Truman Road in Kansas City, Missouri) from 4:00 p.m. to 7:00 p.m. Participants reviewed the following exhibits:

- Purpose and Need
- From Idea to Reality The overall process for a transportation project
- FTEIS Schedule
- 4 Strategy Packages
 - o No-Build
 - o Fix Key Bottlenecks
 - o Add General Lane Capacity
 - o Fix Key Bottlenecks plus Transportation Improvement Corridor
- Getting Involved Project Contact Information
- Interactive PowerPoint slideshow

MEETING NOTIFICATION, ATTENDANCE, and COMMENTS

Approximately 3,070 postcards were mailed to I-70 property owners, umbrella organizations, agencies, businesses, and public officials inviting them to participate in the on-line public meeting and attend the Listening Post. The meetings were also advertised in the *Kansas City Star* and on the KC Scout Highway Message Boards. Ultimately, the MoDOT District 4 (Kansas

City) webpage received 3,000 downloads and the project page received 1,500 downloads of the interactive slideshow developed for the meetings. On-line meeting participants commented via blog and email. Twenty-three (23) people attended the Listening Post and they commented through conversations with staff and with comment cards. The comments received related to the following:

- Fixing key bottlenecks and congestion, e.g. I-70/I-435
- Straightening the Benton and Jackson curves
- Providing alternative modes of transportation, e.g. transit service (light rail, bus) and bike/pedestrian options at entrance/exit ramps and across bridges
- Desire for High Occupancy Vehicle (HOV) and/or reversible lanes
- Land necessary for improvements and the impacts to adjacent neighborhoods
- Increasing the speed limit, e.g. to 65 mph
- High cost associated with improving the freeway
- Managing traffic during the construction of proposed improvements
- Altering the Downtown Loop, e.g. by reducing/changing the exits, making it one-way
- Adding lanes, e.g. near Blue Ridge Cut-off, I-470, and Lee's Summit Road
- Expanding the project limits east to Blue Springs, Missouri
- Accommodating large trucks with lower speed limits and/or separate lanes
- Needed improvements for nearby highways, e.g. I-470, I-670, and US 40 Highway

RESPONSES TO SURVEY NO. 1

A survey was posted on the project blog from January 2nd to January 12th. It asked participants to finish the following statement, "I think I-70 in Kansas City…", with one of four answers. The results were as follows:

Answer	Number of Respondents	Percent of Total Respondents
is fine as it is.	5	11.6%
needs to have bottlenecks	20	46.5%
fixed.		
needs to be expanded with	16	37.2%
four lanes.		
needs to have fewer lanes.	2	4.6%
Total	43	99.9%

VERBATIM BLOG COMMENTS

Forty-four (44) blog comments were received from the on-line public meeting and Listening Post. They include:

• **Anonymous said...**Why doesn't the survey on the right include an option like "I-70 needs to have HOV lanes"??

January 6, 2009 9:58 AM

• **K Lee said...**I think the expansion of the I-70/ 435 location would be the major correction necessary at this point. Not counting event traffic at the stadiums, this area never made sense to me as long as I've lived and commuted from the east side of the city (Blue Springs/ Lee's Summit). That's the busiest area of the entire stretch during rush hours AND sports games, AND IT GOES DOWN TO 2 LANES?!?!! Who was the engineer and proj manager that signed off on that idea? Just never made any sense, glad someone else is finally noticing it. Thank you to those intelligent people!

January 6, 2009 4:35 PM

• **Dayon said...**The I-435 & Jackson curve needs to be worked on right away. Take care of the bottle necks, so the traffic can flow smoother. I hope it doesn't take too many years.

January 6, 2009 5:10 PM

• <u>Dayon</u> said...I hope that you fix the bottle necks. I think that the traffic will run a lot smoother when that is done. Please don't take too long for this project. We need it done. Thank you.

January 6, 2009 5:12 PM

Anonymous said...Why improve I-70? An additional reason is to make the I-70 / US
40 corridor an attractive development corridor with housing, retail, and other
services, all served by a high quality public transit route. Make this corridor a part of
the solution to the region's problems, part of the response to the region's goal of
becoming America's Green Region. –RM

January 6, 2009 5:26 PM

 Anonymous said...The No-Build strategy includes maintaining existing transit service. Does the project include funding to maintain that service? Or does MoDOT count on the ATA and its various local government partners to bear the cost of that? – RM

January 6, 2009 5:29 PM

• Anonymous said...In the Fix Key Bottlenecks strategy, forget about bus on shoulder. Transit will work better and probably faster if it uses the parallel US 40 during traffic backups. Bus on shoulder is just not worth the effort. –RM

January 6, 2009 5:32 PM

• Anonymous said...Option 3 - Add lanes. Please don't do this. Instead, work with local partners to better manage travel demand to reduce traffic. Fuel prices are down right now, but the motoring public knows the trend is upward and they are changing their

travel habits accordingly. Past traffic projections might show increasing travel demand, but those projections are based on past trends -- trends that are no longer valid in a time of generally rising energy prices and growing awareness of climate change and the adaptations that will require of all of us. –RM January 6, 2009 5:36 PM

• Anonymous said...Option 4 - Transportation Improvement Corridor. This option is too vague to even evaluate. However, I'll say that adding managed lanes or HOV / HOT lanes is not a good use of public resources. Such lanes will provide the greatest benefit to people who making long commutes -- a habit that should be discouraged, not encouraged. Furthermore, managed lanes would be added at significant cost, yet would be used only a few hours per week. It would be far better to implement a pricing strategy for the entire corridor -- collect a nominal access fee during the morning commute period for each SOV, while allowing HOVs and buses on without charge. (If necessary, SOVs could be allowed on without paying the access fee if they enter via a metered lane on the access ramp.) Charging the access fee only during the morning commute would impose minimal inconvenience, and would set people's commuting habits for the day, thus making an evening fee unnecessary. A probable consequence of such a pricing strategy would be a freeway that would operate better for everyone -- a High Occupancy Priority Highway. –RM

January 6, 2009 5:44 PM

• Anonymous said...Additional general comment: Significant consideration needs to be given to the impacts this freeway has on adjacent neighborhoods. I-70 was bulldozed through neighborhoods in the 60s with little or no public involvement. That needs to be mitigated through extra attention to the esthetics of the project, minimizing the taking of property for right-of-way, and improving the experience for pedestrians and cyclists who want to move across this freeway.

Additional general comment: A lower speed limit (maybe 60 mph) should become national policy as part of our response to climate change, and a lower speed limit within urban areas makes further sense. A 45-mph speed limit inside the I-435 loop is not at all unreasonable. Energy consumption would be reduced. What's more, traffic noise -- a major component of which is tire noise that increases with speed -- would also be reduced. This would greatly reduce the need for sound walls -- which I would not want if I lived near the freeway. –RM

January 6, 2009 6:03 PM

• Anonymous said...so if more lanes are added, kc. mo. will be stealing more people's land in the name of progress!!!!

January 6, 2009 8:33 PM

brewsterrichard@ymail.com said...I have lived in Kansas City all my life, and I-70's capacity is just fine. I travel a lot and there are problems in every city during rush hour, actually Kansas City's is generally much better than most other cities of the same size.

January 6, 2009 10:21 PM

• Lara said... The FIX KEY BOTTLENECKS AND TRANSPORTATION IMPROVEMENT strategy offers corrections the I-70 corridor has needed for a long time. I've been a Kansas Citian for 36 years, and when I lived in Independence, I used to dread the I-70 corridor's traffic snarls enough to take as many back roads as possible (23rd Street and Truman Road) despite all of the delays caused by multiple stop lights and heavy traffic that had the same idea.

The curves are an issue, but the primary bottleneck is the 435 junction. Rush hour traffic is something we all have to deal with, and is to be expected no matter what improvements are made to any highway system. The 435 bottleneck seems to span a greater portion of the day than rush hour. Of course, if the 435 bottleneck is fixed, that will push more traffic at higher speeds into the 435 to I-470 stretch which will exacerbate the congestion in this area, so attention should be given to capacity here. I've often wondered why there hasn't been a 435/40 hwy junction north of I-70; seems like this would alleviate some of the pressure on the I-70/435 junction. Nice feature of the No-Build strategy, but is it feasible?

Lane consistency is key to smooth transitions between highways, particularly for motorists not familiar with the area. And, I'm a big fan of the Operation Green Light function on parallel routes. I've often jumped off of I-70 at 40 hwy (east-bound before 435) because of congestion and found an even bigger congestion problem because of the traffic light at Blue Ridge Cutoff, for example.

MoDOT has been making great strides in recent years and I applaud them! We need a campaign (perhaps a bumper sticker?) to assist in changing the public perception of MoDOT and their efforts to improve Missouri's highways!

January 7, 2009 12:48 PM

• **20 on I70 said...** I drive I-70 everyday between exit 20 and the downtown loop. Only two things I see need fixing to make traffic flow better. One, the bottleneck at I-435 (who thought up that current design believing one-third of traffic would exit I-435???). Two, get people to drive in the rightmost lane. 40% stay in the middle lane and 40% in the left lane, thinking it is a driving lane instead of a passing lane.

January 7, 2009 4:53 PM

• **Anonymous said...** This needs to be looked at from a comprehensive, big-picture viewpoint. Are there ways to handle or reduce traffic without adding lanes and all

these other massively expensive construction projects?

The answer is yes.

Are they cost-competitive with the solutions being examined in this study?

Yes--in many cases these other solutions would be less expensive.

Are they being looked at an evaluated fairly?

No.

What needs to be done is a "least cost planning" look at this whole situation. Put in place the cheapest/simplest solutions first and then see if more needs to be done. If it does, implement the next cheapest/simplest and you work up the chain until you've solve the problem at a small fraction of the cost of reconstructing I-70 and adding an extra lane.

An example of least-cost planning would be converting an EXISTING lane to HOV/bus. How about when it goes from 2 to 3 lanes, the "new" 3rd lane becomes HOV/bus? That would cost very little to implement and sure would encourage a a lot wiser use of our resources (i.e., more carpooling/bus riding).

See http://www.vtpi.org/tdm/tdm21.htm

January 8, 2009 1:05 PM

• Anonymous said... First off I would like to thank all involved for taking the time to get the publics opinion. 1. There should not be any bottlenecks on the future I-70 unless you want everyone to laugh at you... hysterically. We are all smart enough now to know that taking away a lane of traffic is going to cause problems. 2. We have laws against holding up the flow of traffic. Driving along in the left lane while NOT passing anyone in my opinion falls into that law. Yes there are laws against speeding too but these are all for law enforcement to handle. There needs to be a driver awareness initiative to get people to stop clogging up the left passing lane. It is a cause of traffic and a major contributor to road rage as faster drivers are constantly encountering slow vehicles. If those people want to speed let the cops deal with it and stop getting in their way. 3. If lanes are added a carpool/HOV lane would be a great idea.

January 8, 2009 3:05 PM

• Anonymous said... I say we go ahead and make it 8 lanes... option 3 on that chart if you will seems like the best one of all... will it cost a fortune? Yes... will it be the worst traffic in the country while it's under construction? Yes... will the problems be solved when it's over? Yes... LOSE LOSE WIN

January 8, 2009 3:18 PM

• Anonymous said... Please plan and make needed improvements to detour routes before closing lanes and causing heavy traffic backups. Possibly completing added lanes and bridges before redoing existing lanes.

January 8, 2009 6:51 PM

• Anonymous said... The Benton and Jackson curves are a major sore spot. These areas should have been addressed years ago. I also think the I-70/I-435 interchange needs to be redone as well. In my opinion, the problem also presents itself that there is really no other viable east/west route into/out of the city that doesn't take at least 20-25 minutes longer. We need to look at making improvements to other areas such as 40 hwy and possibly 23rd St in Independence, or 24 hwy. There are some days where it seems that the off ramps cause much of the problems, for example, I-470. I have on many occasions seen drivers slow down to below the posted minimum to make this transition. Fix the onramps/off ramps, you fix most of the problem.

January 8, 2009 10:22 PM

• Anonymous said... Forget about turning I-70 into a toll road. Do not let buses on the shoulder, these are for emergencies, not to drive on. I agree with the other guy, Kansas city has one of the quickest rush hours in the nation, try going to Oklahoma City or Chicago or St. Louis during rush hour. Pack a book, you're gonna be there awhile. Fix the bottlenecks; make I-70 65 mph all the way thru the city and most of your problems will fix themselves. Benton and Jackson curves have always been a problem, so if you want to figure out how to straighten it out, do so without taking any more land or homes. I don't think it can be done. If the public would follow the speed limit, drive smart, and pay attention, it would go a lot faster.

<u>January 8, 2009 10:29 PM</u>

• Anonymous said... I-70 Needs additional lanes. To improve safety on-ramps need to be longer in order to give ramp traffic a chance to merge safely with Interstate traffic. An additional lane from exit 4 or 5 heading east to I-470 would alleviate the bottleneck and decrease transit time and also reduce pollution, as cars and trucks would not be idling as much as they do now. Please move on this quickly, as the new President

seems willing to work with local governments on infrastructure projects. The Noland Road Bridge project was well done, this could be as well!! <u>January 10, 2009 3:37 AM</u>

Anonymous said... The comment at 1:05 pm on Jan 8 calls attention to "least cost planning." In a time of budget and resource constraints, that approach makes enormous sense, and VTPI (Victoria Transport Policy Institute) http://www.vtpi.org/tdm/tdm21.htm is a great resource. --RM

January 11, 2009 12:57 PM

• Anonymous said... I think either option 3 or 4 should be used. If we're going to be doing a huge project like this, we might as well do it right and make it sustainable. I would say make it 4 lanes each way all the way, but if ROW is going to be an issue, I'd vote for a reversible lane versus an HOV/HOT lane (Kansas City doesn't have the traffic to warrant that kind of action). However, any homes/land that would be taken would probably be put to better use as a road than what they are now...in case you haven't paid attention to the fact that most of the buildings(especially around The Curves) are crumbling anyway...imminent domain would give those people a chance to find somewhere better.

I also think the limits of the 435 interchange should be extended more on the south side to straighten it out a little, I cannot tell you how many accidents I have seen coming out of that curve on the south side right before the overpass. And they're usually pretty bad, high-speed wrecks. I think the Bus-on-shoulder idea is good from downtown to 40 hwy, people just need to be educated about it, otherwise they won't agree. This would be a great incentive for commuters from Independence to Downtown to take the bus as long as the frequency is increased during peak period.

Priority 1 should be the 70/435 interchange obviously. if nothing else is to be done, that interchange is one of the most dangerous and inconvenient in Kansas City.

~Kati

January 16, 2009 6:00 PM

 Anonymous said... I agree with many on here that I-435 and I-70 interchange need to be looked at. I drive everyday from Independence/Blue Springs and this is the congestion area every time, and don't even ask what it's like when there's a football game.

Someone earlier said making the speed limit on I-70 65mph and I have to agree. Changing the speed limit 3 different times confuses people, and especially causes

many accidents. People who don't slow down crash into those that do and so forth.

I think MoDot has done a lot in the previous few years, and this seems like the logical fix for me...I just hope it doesn't take 10 years to completely overhaul that interchange.

-DE

January 18, 2009 3:06 PM

• Anonymous said... I think that the addition of a land from I-470 to the loop is a great idea. I've always thought we needed another lane especially heading towards the city. With the populations growing rapidly in the suburbs we need this. There are some downsides too like construction. This project would take a long time and create more of a headache while being done. I personally think it would be worth the trouble, but I understand many would not.

If I had to put all my ideas down here I would say add a lane each east and west bound, DEFINITELY make I-435 and I-70 interchange work easier, and also straighten out the curves. I personally think the downtown loop works as well as it's going to, and I think adding a bus lane would only make congestion worse. I think adding park and ride facilities is a great idea, just not putting a lane specifically for the busses.

Thank you for opening this up to everyone, I think this is a great and easy way for people to get out their opinions of the future of their everyday commute. --DE

January 18, 2009 3:17 PM

• Anonymous said... The I70/I435 issue of one of merging capacity. The entire run out from this area going east is slowed by the Blue Ridge Hill itself and loaded trucks running up the hill past Sterling and Blue Ridge Blvd @50 miles per hour vs. 65. Bumpy pavement also slows average speeds.

January 25, 2009 3:37 PM

• Tom said... My commute from the northland to Blue Springs is intolerable. Every night I must wait 15 minutes just to get on I-70 from I-435-SB and then another 30 min to go 15 miles to Blue Springs. Nothing has changed here since the stadium was built in the 70's and it's time to bite the bullet and spend some money. How about an exit ramp from 435sb to 40 Highway? How about 5 lanes to the sports complex and 4 lanes to Noland rd.? Couldn't hurt.

January 25, 2009 7:21 PM

Anonymous said... Missouri's roads are a joke period! I think they need to make I-70 a
toll road from KC to St Louis in order to fund road improvements in Missouri. I
moved to Missouri from out of state and my insurance rates went WAY UP, just
because of the roads and the amount of accidents in MO.

January 29, 2009 8:39 AM

• Anonymous said... I travel to St. Louis many times a year and there are many things about I-70 I would change. I will tell you like I told the Johnson County folks bus on the shoulder not a good idea actually this is the worst idea one could think of. Very dangerous the city would spend more money towing cars out of this lane. If we spend money to build a lane that only buses use why not look at cities like Atlanta were they have a full lane that only buses can use but cars carrying 2 or more people can use this lane(it's called a carpool lane.) Doing this would add to the whole fake "Green" movement by not only giving bus riders a faster route it would encourage carpooling. This lane would be open to all travelers during certain times of the day and open to only buses and certain cars during rush hour.

Like many of these people I see the pain of getting on and off I70. Through downtown why not eliminate some ramps and make one big on ramp because there are too many people getting on at Broadway and Main and then these poor people have to merge all the way over to get to I35 north.

I do not know what we have been thinking for so long this traffic grid is for a population of 60,000. Let's get it together and go with the whole bus idea because other mass transit plans make too much sense.

I do understand the issues you folks face and you do a good job.

January 29, 2009 10:17 AM

• Anonymous said... Cheap fixes and short term solutions do not work. If you settle on cheap and then look at how it does you will find problems and you will stuck with fixing it and that will be very very expensive. Spend the money now. Why not give the people of Lee's Summit and Blue Springs a better way of travel. With the expansion of downtown and the population growth like that of Olathe these communities need a future growth project because soon these areas could see pop. of 100,000 plus. I live in Olathe and I wish that KDOT would have look at adding a lane to I35 about 10 years ago.

January 29, 2009 10:28 AM

• **Anonymous said...** Attack the bottlenecks quickly and continue to use Scout to help manage traffic. Let's see how well traffic flow improves with this strategy before

spending millions of more dollars creating long-term traffic impacts by trying to unsuccessfully build our way out of congestion. Why isn't a multimodal / transportation demand strategies education component included in this strategy?

January 29, 2009 10:58 AM

• **Anonymous said...** While property prices are down, buy the property to get rid of the curves. Add two lanes and straighten this out!

The best long term is two inter lane for cars and 3 outer lanes (Like WDC). This will also save significant gas/CO2.

January 29, 2009 11:19 AM

Anonymous said... Fix the bottlenecks, especially at the 70/435 interchange. Do NOT give us HOV lanes! I've lived in several other large metro areas where HOV lanes were implemented (San Francisco, Miami, Dallas, DC) and it ALWAYS makes traffic congestion WORSE! All it ever accomplishes is to force SOVs to compete for positions in less available lanes. It is never effective in prompting drivers to carpool.

January 29, 2009 11:33 AM

• **Anonymous said...** Widening I70 and eliminating the bottlenecks are NOT rocket science, just get it done.

January 29, 2009 4:46 PM

• **Kevin Haggerty said...** I think the Benton and Jackson curves need to be changed so they are not so dangerous.

I think the I-435 exchanges, especially to the sports complex need to be widened and the ramps lengthened.

I think the downtown loop needs to be changed.

There are too many exits. Some of them need to be eliminated. Also the downtown loop needs to be larger to access more cars.

I think the I-470 exchange needs work. It needs to be widened and the ramps lengthened. That is a growing area. More people will be using it in the future. I think fixing it now will head off some future problems as the city continues to grow. Kevin H.

<u>January 29, 2009 5:33 PM</u>

• **JPB said...** More Lanes at the 435 70 interchange on 70. Squeezing down to 2 lanes under 435 creates problems.

Traffic alert signs should also be put on 40 highways and on Blue Ridge Blvd and Cutoff. If I am on one of the streets and can see a traffic alert sign that says there is a problem on 70 then I can avoid 70 and take an alternate route. Right now when I get on 70 from Blue Ridge Blvd. I find out that there is a back up after I am on 70.

Expand 40 so it can be used as a viable alternate route. Time the stop lights on it to avoid backups.

Put signs up on westbound 70 that remind motorists to turn on their headlights in the morning. When the sun comes up you can't merge or change lanes with the sun in your mirror. If people have their lights on you can see them better in your mirror. The signs can flash a yellow light in the morning rush when the sun is just over the horizon in the east.

Make dedicated exit and entrance lanes that are divided from the interstate at the 70 435 interchange like they have on 435 in the Metcalf to 69 highway area.

Take out the curves at Benton and Jackson. Whoever designed this was not thinking. The approach to downtown from 435 should be as straight as possible or with a slight progressive curve not 2 sharp curves as it is now.

Make dedicated through lanes starting east of Blue Springs that end in Bonner Springs. These would be parallel from the main interstate and e used by truckers or people travelling through the metro. You can have local lanes for people who need to get off at an exit and express through lanes for those passing through town. If there is no room for a separate stretch of lanes then build an elevated interstate for the trucks and through traffic.

i-70 would not be so bad if there was another east west interstate that runs east to west along 95th or 87th street and along the Missouri River.

Get rid of the stop lights that are along 71 (Bruce R Watkins) that might encourage people who live in south KC area to take 71 instead of going up 435 to 70.

You can have a set of 3-4 extra lanes in the middle that can be used for westbound traffic in the morning and then can switch over to east bound in the evening. This would be great for when there are events at the Sports Complex.

January 29, 2009 6:18 PM

Anonymous said... No Build or Fix Bottlenecks is the way to go. Mass public transit is
really the only option. Increasing the capacity will only increase demand, at which
point we are back where we started. MODOT's current right-of-way might be better

used in the future for some sort of rail for the public. HOV is also not the answer as people only seem to use it if they are traveling long distances (defeating the purpose of urban areas with transit and higher densities which would relieve congestion) or already happen to have 2 or more people in the car.

January 29, 2009 9:33 PM

• Anonymous said... Facilitating travel into and around downtown benefits the area greatly and the city as a whole so this discussion is a big step toward making the Kansas City downtown one to be proud of.

I think exits on the north side need to be condensed and some eliminated so that people getting on and off the highway do not cause as much backup. I don't see any scenario where adding lanes would not be beneficial to all travelers, local or interstate.

The bottom line is that this highway is outdated and needs to be updated to meet the needs of a shifting area, growing city and new travelling patterns. Please take some of the suggestions you have received and do everything possible to improve this important road.

January 30, 2009 9:37 AM

• **chipdsn1 said...** I am in support of least cost planning. Since KC has some of the least congested roads of any big city I doubt that we need more lanes that would disrupt the surrounding neighborhoods. Probably teaching people to drive better would be the cheapest solution.

Anyway, we need more transit though I don't know if transit on the shoulder is a good idea. Study another region and see if it works. I think a toll road is ok. We need to encourage carpooling, transit and discourage policies that make sprawl.

Another thing, make sure bridges and underpasses have safe infrastructure for walking and bicycling. I want to make sure that entrance and exit ramps account for slower bicycling and walking traffic that may cross the motorized traffic. This might include colored bicycle lanes and signals that work for pedestrians and cyclists. Anywhere transit traffic is in the I-70 corridor make sure the transit access is safe and friendly for pedestrians.

Thanks for letting the public comment.

January 31, 2009 6:49 PM

• Anonymous said... Highways that get the trucks to drive in the far right lanes or left lanes only have much better movement and are a lot less dangerous. I am nearly killed every time I get on the I-70 exchange by big huge trucks that like to play games. Many times I have been sandwiched between two (in my tiny car) and I just know if someone stopped in front of them I would be dead. Terrible situation.

January 31, 2009 7:13 PM

• **Brent Hugh said...** Attention needs to be given to safe bicycle and pedestrian access across I-70 wherever bridges are built or modified for streets that cross the interstate.

Major highways like I-70 are among the biggest impediments to bicycle and pedestrian traffic in the metro area. Much of this could be mitigated if attention were paid at the crossing points.

The problem is made worse because the freeway and its interchanges to tend to attract commercial development. Commercial development means traffic generators or destinations that bicyclists and pedestrians need access just like everyone else.

Since these destinations are close to a freeway the bicycle and pedestrian access general means helping the bicyclist or pedestrian get safely across the freeway interchange.

It takes a lot of careful design to do this right (and also maintain ADA compliance) and frankly it is not often been done right in the KC area up to now.

However there are many examples across the country of these type of interchanges that can handle the motor vehicles accessing the freeways *and* also provide safe bicycle & pedestrian access for those travel by foot or bicycle through the interchange.

So it *can* be done and I have every confidence that MoDOT can do it and do it right if you put your mind to it.

January 31, 2009 8:40 PM

• Brent Hugh said... Reading through the comments above, I agree with those above who have voiced support for some way to better accommodate transit, encourage more carpooling, be sensitive to the neighborhoods the freeway runs through (sorry, but there is no need to ruin perfectly good neighborhoods closer in and that happen to be close to the freeway, just so people who want to live further out where it is "nice" can get there a few seconds faster), have a very good program for real, meaningful public involved in planning, design and all the way through the project, take into consideration all important variables (i.e. noise, environment, sprawl, not just traffic

flow), look for more inexpensive alternatives to huge construction projects such as traffic demand management and least-cost planning.

In general, maintain what we have well before we go building something big, new, and expensive that causes even further unforeseen problems and adds further huge ongoing maintenance costs when it appears that we can't even adequately maintain what we already have.

January 31, 2009 8:51 PM

• **Anonymous said...** Widen it between 435 and 470 and add more lanes under 435.

Rebuild the interchanges at 435 and 470 to remove the loop ramps.

Add lanes between the exits of 470, Lee's Summit Road, Noland, US 40 and Blue Ridge Cutoff, like they do on the south side of 435 and on all the freeways on the KS side. That way people that can't seem to get up to speed and use those lanes and not slow the entire interstate down.

Do more with buses and park and rides. Please don't do any HOV or reversible lanes. I have never seen those work in any city besides maybe LA or Seattle and they don't really work too well there. If you are going to add a lane, let everybody use it.

February 1, 2009 12:54 AM

• Anonymous said... There's ongoing interest in commuter rail to the south and east. Previous studies have all but ruled it out, but those studies have assumed no new rail segments. Commuter rail in from Lee's Summit and Raytown would be much more feasible if there were a more direct route, and such a route is possible if trains had a short-cut from near I-70 and the Blue River to about 18th Street. This I-70 study should reserve space for a future rail link between the Blue River and about 18th Street -- just as the Watkins Drive project reserved space for light rail in its right-of-way. –RM

February 2, 2009 10:15 AM

VERBATIM EMAIL COMMENTS

The following 80 emails were received.

• <u>01/02/2009 07:04 PM</u>

Glad to hear this area of I-70 is up for improvement. Something similar to the Lee's Summit to the Triangle has worked very well, particularly the exit ramp to 350 highway-it eliminated highway back-up on 470, making it much safer for everyone. Good luck with your project- it's definitely needed and a worthwhile effort.

• 01/02/2009 10:57 PM

I strongly urge you to consider going a little further East to include Blue Springs. I drive Blue Springs to Downtown KC every day for work and it's a nightmare! Unfortunately all the good jobs are in the city and we have no choice. There is no reason a 20 minute drive should take an hour or more. I am often late to work or late getting home to pick up the kids because of the traffic. It's really gotten bad over the last 10 years

• 01/02/2009 11:20 PM

I have been to a lot of different places courtesy of my job as a truck driver, and I have seen a lot of ways to route traffic -- some of which work and more that don't. One of the worst traffic control devices I have ever seen or experienced is the "round-about" at the bottom of exit ramps. Large commercial vehicles can't navigate the tight turn around the round-about without taking up more than one lane of traffic, which compromises the safety of everyone in the intersection. Please, please do NOT consider using roundabouts! However, one of the most effective ways to manage traffic flow that I have personally used are "feeder roads" like they have in the major metropolitan areas in Texas. I'm not a big fan of Texas or Texas traffic, but the "feeder roads" idea does work. This would be similar to the idea already implemented on the north-side of the downtown loop and in front of the outlet mall at Odessa. Frontage roads would handle all of the on-ramp and off-ramp traffic by exiting the highway onto the "feeder roads", and the "feeder roads" would feed traffic onto the surface streets by the use of traffic lights at crossings like Noland Road, the Blue Ridge Cut-off, etc. The same would hold true for traffic entering the highway system. They would turn onto the "feeder road", and then take a ramp onto the highway which allows traffic the time and space necessary to gain speed to enter the highway safely. Thank you for listening to my suggestion, I look forward to the improvements on I-70!

• <u>01/02/2009 11:37 PM</u>

Whatever you do, just be smart about how you close the roads. I mean, shutting down entire sections of highway for days, weeks, or months is so ridiculous, especially when you're talking about such a huge interstate such as I-70. Do a lot of night work if possible, or on weekends. Also, think about the Chiefs and Royals traffic, or other events that are huge at the time, where out of town guests may be inconvenienced. BE SMART! We are grateful for you fixing the highway, but no one likes detours that take more time out of the day and cause headaches. Thanks.

• <u>01/03/2009 06:17 AM</u>

How on earth are you going to make this happen with SO many people driving I-70 daily to go to work? We already have a horrible time of it.

I have a suggestion for you MODOT. How about working on this: When there is a serious accident on I-70 - how about shutting down the access to the highway for the nearest entry ramp BEFORE the accident. For instance, if there is a wreck by Noland Road, you would shut down the ramp from Lee's Summit Road. I can't tell you how many times I've sat on our bus and watched 30 - 40 cars try and get on an already loaded I-70. You should shut that entry ramp down and force the 30 - 40 cars to find another way.

What do you think of this?

• <u>01/03/2009 08:28 AM</u>

First priority should be to fix bottleneck at area of Manchester Bridge going east just west of the stadium, where the road goes from 3 lanes to 2 lanes. This problem backs traffic up at rush hour. Should increase to 3+ lanes for entire section.

• 01/03/2009 10:29AM

By rebuilding US 50 highway from St. Louis to I-470 to a limited access freeway, half of the commercial and other traffic can go around downtown Kansas City and Independence. This would not only cut down on traffic, but would bring more revenue to central Missouri. Making US-71 highway limited access [and removing the stoplights in Kansas City, which can be done by taking them back to court on the grounds that they are an extreme safety hazard and do no good anyway] from Kansas City to I-44 would allow more vehicles to go south in Missouri rather than crossing into Kansas. This would put more revenue into western Missouri. It would also be a benefit to Missouri to extend I-29,with Federal Help, from Kansas City to the boot heel of Missouri as a Toll-road[if you can get the legislature to change the constitution to allow it]which would not only bring in more revenue, but would create more jobs and bring in more businesses. There is a way to finance the I-29 extension if toll roads would be allowed.

• 01/03/2009 10:32 AM

I want to take this time to thank the MODOT workers in the Oak Grove-Odessa area for the great job they are doing year around.

• 01/03/2009 11:51 PM

Thank God I have never had to travel I-70 as a commute. The Benton and Jackson curves have seen more accidents than any other portion of I-70. This design has been atrocious since it was first designed and built- must have been some really bad ROW issues back then! Was this a Pendergast era project? Were these ever Interstate rated designs? Nothing short of a stoplight in the middle of each corner could congest the traffic worse! Nothing that you do in adding lanes will work, if you can't straighten out these two. I would use imminent domain to make a new ROW that bisects these two corners, and makes the road with much better radii. These two corners are treacherous

when it is dry, let alone when it is inclement weather. I'm sure that a few drug houses might be displaced, but that would be a good thing too, right? (No offense intended to the local residents, but that is my perception of the area.) Once the road is straightened, then allow new construction where the old road bed was, trade the ROW areas. After these curves are fixed, then extra lanes can be added in a few years.

• 01/04/2009 09:18 PM

Another 2-3 year "study"? Can we possibly drag this out any more?

The interstate system on Kansas side of KC has been rebuilt twice since anything has been done to I-70 on the MO side.

West of 470, has it changed since 1950?

Can we just do something? Widen it, build some auxiliary lanes, do something with the main entry way into KC besides study it to death.

You guys should study KC's light rail system too!

Sorry, but I-70 in KC is an embarrassment that has gone on long enough.

• 01/04/2009 10:56 PM

I commute from Lee's Summit road to Shawnee Mission, KS, using I70 to I35S. Of all the proposed measures, I like the "Fix Key Bottlenecks plus Transportation Improvement Corridor Strategy." My commute time is increased by about 10 to 15 minutes (with no accidents). I do like the initiatives to reduce the bottleneck areas and reduce accident propensity. As I'm originally from Chicago and dealt with traffic there, the increased travel time here is not that extraordinary and actually provides little cost to encourage drivers to use public transportation. I think much focus on public transportation would be a waste. I would prefer to see the corridor as a reversible lane (for morning/evening rush), or perhaps an express lane or two (i.e. limited exits). I also don't think a High Occupancy toll would provide much benefit. A small reduction in travel time wouldn't provide much incentive for most users to forego normal traffic for the toll road. I do like the focus beyond just the downtown loop but all the way out to 470 to improve bottlenecks and entrance/exits, as these can be the most congested areas.

• 01/05/2009 07:26 AM

Combining transportation projects:

- 1. Kansas City wants light rail.
- 2. MO needs an improved I-70.

Recommendation:

- 1. Do not build any new road projects without the ability to expand with light rail sometime in the future if not now.
- 2. A high-speed light rail between KC and STL would take traffic off I-70.

- 3. If I could get between KC and STL 3 hrs. I could use either airport. I could attend more functions and relax during the travel. This could increase taxi service.
- 4. If high-speed light rail worked between KC and STL, how well would it work between Dallas, Chicago, Minneapolis, or Denver? KC and STL could once again be a central hub.
- 5. If the light rail was electric, we would also help to reduce emissions.
- 6. Run a light rail down the middle of I-435 in KC. This would cover all metropolitan areas and give them a place to connect. KC would not have to acquire property through eminent domain because you already own the median. You could easily connect to KCI, Speedway Complex, Kaufman Stadium, and other major complexes. Re-do bus routes to maximize the convenience of this issue. By going down the middle of I-435 there are many more people in a position to win. This could provide additional tax dollars from all the communities, Kansas & Missouri States and federal revenue as well.

• <u>01/05/2009 09:13 AM</u>

I would like to see a great increase in available public transportation along the East-West I-70 corridor. Park and Ride, actually costs more than driving for many residents, and the bus must fight the very same rush hour traffic.

• <u>01/05/2009 09:46 AM</u>

Is there a complete document about the I-70 Study I can access online (or that can be emailed to me) to reproduce for constituents who do not have web access?

Thank you very much.

• 01/05/2009 09:05 PM

My normal daily commute from Colbern Road in Lee's Summit to around the downtown airport. The key points I would like addressed are

- 1. Clover interchange from N470 to I70. This interchange is very dangerous during high traffic. There is not enough space to get up to speed to merge. This is especially true for drivers who are not familiar with clover interchanges.
- 2. I 70 corridor from 470 to Blue Ridge BLVD West bound. This area needs more lanes and longer merge lanes. Traffic usually slows in this area during peak commute.
- 3. The West Bound I-70 exit to Broadway on the north side of the loop is a death trap. Lanes merging onto I 70 Lane merging off to Broadway compounding by many cars wanting to exit on to 35 south bound.
- 4. On the return trip the E I-70 from downtown, the curves slow traffic flow dramatically. Can we straighten the road?
- 5. The interchange at 435 W bound is also a major traffic slow down. The hill from 435 to the stadiums as well as the merging traffic from 435 and stadium traffic brings I 70 to

a standstill. (Recommend a Stadium exit for I 70 before 435 that merges with 435 stadium traffic allowing I 70 to be dedicated to thru traffic.)

6. From the stadium to 470 the entire system would benefit from an additional lane and better interchanges at Blue Ridge, Noland and Lees Summit Road.

• 01/06/2009 09:04 AM

I am a lifelong KC resident and enjoy driving

I-70. I live in South KCMO near Leawood and work downtown. I have the option to take I-35 in KS, 71 Hwy in MO, or 435 E/N to I-70W in MO to get to work every day, and hands down, I-70 wins. As long as I am not traveling during peak rush hour times on I-70(7:15 - 8 am; 4:45-5:30 pm) my commute is rather pleasant and speedy.

If improvements will be made to I-70, I would like to see all of the curves and bends eliminated; from Benton to Van Brunt is where a lot of congestion happens during rush hour simply because people have to slow down to go through around the curves.

Also I think near the stadiums the interstate needs to grow to 4 lanes all the way until I-470, versus squeezing down to 2 at the 435 interchanges; this also causes a lot of congestion.

Last, I also suggest some type of very long exit ramps specifically for stadium traffic, similar to what was done with the Grandview triangle area in South KCMO, to force game traffic off the highway and preventing back-ups on game days.

I am excited to see Missouri be proactive in this area and I hope my comments are helpful.

• <u>01/06/2009 09:27 AM</u>

The Benton and Jackson curves have got to be considered. They should have never been built like that. They are the most trouble on I-70. And the I-435 exchanges near the stadiums need to be redesigned, add another lane or something.

• 01/06/2009 09:31 AM

I-70 seriously needs to be fixed and lanes need to be added as they have been at the Grandview Triangle. I don't understand why I-70 is not given the same time, consideration, resources and money as all the other projects around this city. I-70 is one of the most traveled roads in the US let alone the state! When I-70 was resurfaced a few years ago lanes should have been added. I don't understand why so many highways around here are 4 lanes and I-70 the main way to downtown is only three and at some points 2. If any construction is done that will cause time delays lanes have to be added. Otherwise it would just be a waste of time and a headache for all commuters who use I-70.

• 01/06/2009 05:51 PM

The Jackson and Benton Curves are the biggest bottle-neck places on I-70 into and out of downtown KC. They are also very hazardous to drivers because of the semi-truck traffic. Adding another lane will help but I feel will not solve the problem. Doing away with the sharp curves will be the only way to improve those areas. I've heard many truck drivers comment on those curves because they take a chance at their load shifting. Why can't we have a straight away into and out of downtown. Also the short on-ramps at Truman and Prospect are really a hazard.

01/06/2009 07:59 PM

I've driven this route for 12 years and the 70/435 interchange is typically the source for major back-up / slowdown. In my mind this is the #1 scope of work that needs to be addressed. To be 8 miles from downtown & have just 4 lanes on what is really the only good east/west thoroughfare doesn't even make common sense.

• 01/06/2009 08:05 PM

By far the most visionary and long term solution. Without a doubt the 70/435 interchange needs to be widened with more lanes. To have just 4 lanes 8 miles from downtown on the major east/west thoroughfare is tragic. It's always the source of backups & wrecks.

• <u>01/06/2009 10:43 PM</u>

I-70 for the most part doesn't need any improvements at the time. I-70's bridges may need some rehabilitation, but instead of redesigning the entire I-70 because of certain points, why not just improve those points. With the current economy I don't think a city of our size should be undergoing such a huge task or project, especially a project that could take upwards of 5 years. I understand safety for the city's residents and visitors, but embarking on such a task this tremendous to reduce our already low crash rates and severity on I-70 is quite frankly silly. Congestion I noticed was also a large concern, every city has congestion during "rush hour," or during construction. The reason I-70 is always congested if not during rush hour is because Kansas City is always got some highway ripped up and torn out. We need to give our citizens a moment to recuperate from construction. Just a few months ago the Manchester Bridge was all torn up and torn out, and that was a huge headache for all who traveled that way and now you want that same situation city-wide. Accessibility was another problem noted in the presentation, perhaps instead of changing the ramps we should give people lessons in getting on the highway, because all too many times I've noticed people stopping at the end of the ramp to get on the highway. And honestly you expect tearing I-70 up will improve our goods movement through Kansas City. The items that would be moved through Kansas City on the new and improved I-70 will still be moved through on the "old" I-70. I do agree that the Jackson curve could withstand some improvement but throwing our city head first into chaos because of a few "bad spots," just sounds totally outrageous, similar to if a doctor cut off your arm because you hurt your elbow, it just doesn't add up! Please feel free to contact me if any of my comments need clarification.

01/06/2009 11:19 PM

I appreciate the way you keep I-70 safe during the snow/ice storms, I realize that accidents happen but to be cautious and keep your distance and don't drink and drive have a lot to do with those tragic accidents.

I would like to see a bus system that would go all the way to Concordia, MO, there are a lot of people living in that area and going all the way to the downtown area, like other cities and that they would run later at night, I work 0700-1900 and the bus stops too early for me to take it from Blue Springs (I couldn't come home), that would help a lot of traffic on I-70. I have been to Honolulu where you can take the bus all around the Island, It is rather enjoyable not to have to worry about driving, so maybe one day hopefully before I retire. Thanks again

• 01/07/2009 07:55 AM

I-70 is next to my backyard so I'm very interested in sound barriers. Also, I know many people who will not move out east because of I-70 and its bottlenecks.

• 01/07/2009 08:50 AM

Want to hear from you, can't go to meetings, would like to know how this is going to impact property if any

• 01/07/2009 06:58 PM

I prefer the second choice. Less construction and cost than #3 & #4. I don't want 4 lanes of traffic. I also think the speed limit should be reduced to 55 during rush hours from Blue Springs to 435.

• 01/08/2009 04:07 AM

My main concern is and has been for some time that the large trucks are allowed to haul very heavy loads at high rates of speed. When I traveled out to the eastern states the trucks were kept at 55 mph and the autos at 65 mph. The highway was in much better shape and there were less serious accidents involving trucks. Also, those speed limits were enforced. I have been passed on a regular basis in Missouri by loaded trucks going well over 75 mph. it doesn't take a genius to figure this one out. Let's slow things down and save lives and money. If not, let the bills for repairs and the blood of the injured and killed be in the hands of those able to make the changes. I will look forward to your response. Thank You.

• 01/08/2009 06:04 PM

Any work should be done at night and all lanes should be cleared for rush hours

• 01/08/2009 07:23 PM

Please keep me informed on the progress of this project. I still would like to see HOV lanes to force commuters to carpool to enjoy a faster traffic lane... our public transportation is so poor here... we have no light rail and the metro bus system caters to the inter-city only and it is scary to ride the bus after dark. I ride the bus daily from the I-70 Park and Ride at Blue Ridge to downtown.

Thanks

01/09/2009 09:21 AM

I believe the add general use lane is the best solution. At a minimum it needs to be 4 lanes each direction if not 5. The biggest problem is the I-70/435 interchange. That should be priority 1 to make it 4 or 5 lanes wide. I believe that even if you do nothing else but make it 3 lanes the backups would be reduced greatly.

Also since I ride the bus a bus only/ HOV lane would also be nice.

• 01/09/2009 02:51 PM

The bottle neck at east & west I-70 at the 435 needs to be made into 3 lanes all the way up to Blue Ridge cutoff. The exit at Blue Ridge needs a better design in is really a mess after game and rush hour traffic. The cables need to be repaired between Blue Springs and oak grove most of it is done how safe is that? Why wasn't the lane from hwy 7 to Adams Dairy Parkway on i-70 east made into 3 lanes it is very dangerous during rush hour every day. That is probably too far for the people that check the roads to come it is kinda of out of the city limits.

• 01/10/2009 12:51 AM

I looked over the strategies with my husband, as we live near and use the 23rd street access to I-70 on a daily basis. We feel the Strategy to Add General Lane Capacity would be the best course of action. The connection to US-71 is essential. Lane expansion from the loop to 23rd and from 40 hwy to 470 would be beneficial to those who work in the area.

Thank you for letting us in on the process.

• <u>01/11/2009 06:38 AM</u>

Mr. Zafft:

I am the President of the Heritage Park Condominium Association. We are located on the northeast corner of I-70 and Crysler Avenue in Independence. I have not been able to make one of your meetings about the I-70 project, but have several questions. I don't think the residents of our community have picked up on this proposed project, but I think it will impact us greatly, as we are just off I-70.I was wondering if it would be possible for me and a few residents to meet with you about this project and find out what is going to happen with our community. There is no big rush - we can wait a few months if that would work for you. However, I feel like we need to discuss our community and make sure we all work together to make this work smoothly.

I look forward to hearing from you.

01/12/2009 06:03 AM

Would direct access from 71 northbound to i-70 east be possible? Right now drivers must exit at Truman road and then get on I-70 at Paseo.

• <u>01/12/2009 09:56 AM</u>

I agree with the project for taking care of the bottlenecks on I-70.

• <u>01/14/2009 10:56 AM</u>

Hi Randy -

Mike Frisch sent me your contact info (see below).

We have published our plan with Washington Wheatley and would like to meet with you and the I-70 team to present our findings.

Please let me know a time that works for you.

• 01/15/2009 06:32 PM

I believe it is a good idea to expand the highway to 8 lanes across it will improve traffic and cut down on accidents by allowing people to relax and not worrying about being late to work because it takes 40 minutes to travel 2 miles

01/16/2009 10:51 AM

I-70 is part of a mass transit program. I don't think any of the ideas will work for long. We need to add light and heavy rail along with updating the bus network. Someone needs to go to Chicago and look how all forms of transit work together. The Kansas City Region need heavy rail in all directions for about 60-90 miles. If it were my money I would set up a heavy rail system that serves Topeka in the West, St. Joe and Cameron in the north, Columbia/Jefferson City in the East and Nevada and Clinton in the South. I would be looking at a regional light rail plan for the metro and would reroute buses to serve those lines. I would also increase parking prices downtown to encourage people to change to mass transit.

01/19/2009 06:27 PM

I like the no build idea. I-70 is working and compared to other parts of the country AZ, MD, TX, D.C. our traffic is awesome and moves along. Our big problem is the way the residents and truck drivers drive.

Thanks

• 01/21/2009 02:10 PM

I have not seen how many lanes are proposed for 670 through the downtown loop. Only a consistent number. Also unclear what is planned for 670 in the downtown loop about

on and off ramps. That area is where the most improvements are needed as I think that is a very dangerous area to drive through. I would like to see more lanes there and eliminate or change the on and off lanes. Having to move over two full lanes to continue through on 670 in heavy traffic is not good. Improvements here should be to provide a smooth flow through for going all the way through on 670 out the west side of the downtown loop without having to do a bunch of lane changes. Eliminating some of the on and off ramps for streets in the middle might help flow and safety.

• 01/22/2009 08:38 AM

I sent MODOT comments about the widening of I-70 from I-470 to 7 Hwy. I thought that the money being spent for that should go to revamping the I-435 interchange and the Jackson and Benton curves. Since I drive I-70 almost every day of the week I can say that the exiting improvement is nice but I still think that the money should have been spent for this project. As with any project, without the costs associated to each of the four plans it is really hard to determine which is the biggest bang for the buck. Without knowing this here is my opinion. Of course without those numbers most people will say let's do it all. That of course is not realistic. As for each plan here are my thoughts. The no-build solution should be renamed to no-solution solution. All it is spending minimal money to keep it as it is for the most part. This to me as a taxpayer is unacceptable. The fix key bottlenecks is probably the best of all four. It provides a resolution at I will assume the lowest cost due to the fact that it is also included in the other three. Add general lane capacity in my opinion is also desperately needed at some point in time but don't feel that if the cost is sufficiently more to add this then it can probably wait. Improvement of the I-435 and the curve bottlenecks should bring about enough resolution to provide a huge impact without the lanes increased. Since I drive this every day the construction for this will be a pain for quite a while. Therefore I do believe that if all of it is a legitimate option let's just do it all at the same time.

However I still don't think adding lane capacity is immediately necessary if the bottlenecks are significantly improved. The improvement corridor option is one that I personally don't' quite comprehend with the information given. Ultimately to me the most immediate issue is to fix the I-435, Jackson and Benton curve bottlenecks. Anything else at this point and time is fluff and should probably wait.

Thanks for your time not only to read this but to take on this enormous task.

• 01/22/2009 11:16 AM

I would like to find out how the Kansas City Community Garden near Indiana Street might be affected. I have gardened at this location for 3 years, and it is an important source of nutritious, affordable food for my immediate and extended family.

There are many families and elderly people that have gardens there, many who are in direr straights than me. I would hate to see the garden paved over.

Please advise if there is any information about how the area to the west of Indiana may be affected.

http://maps.google.com/maps?f=q&source=s q&hl=en&geocode=&q=benton+%26+trum an,+kansas+city,+mo&sll=37.0625,-

95.677068&sspn=48.555061,79.101563&ie=UTF8&ll=39.0962,-

94.542785&spn=0.002927,0.004828&t=h&z=180

• 1/22/2009 02:40 PM

Thanks for the reply,

I didn't mean to take it out on you, but it seems like MoDot, or Missouri in general doesn't give this side of the state anything like it does the St Louis area. All the freeways in St Louis are wide, have directional flyover type interchanges etc. And now that I-64 is getting rebuilt, its like night and day compared to KC.

I understand you have done wonders in the past decade with the Grandview Triangle, Bruce Watkins, and now the new Paseo Bridge, not to mention all the repaving which has brought he MO side highways out of the dark ages and they don't destroy our cars anymore.

But we are still behind, as I would guess you know.

While St Louis widens highways 60 miles from the city, we sit here with a four lane I-70 in eastern Blue Springs. While St Louis builds 10 lane page avenue freeways and the ten lane 370 beltway, we get Band-Aids on four lane I-470 and still have cloverleaf interchanges.

I guess I'm saying we still have a long way to go. I-70 should have been widened a long time ago and we are probably 10 years out from seeing any real progress.

But since it appears that you will listen and pass on what I have to say, here are my suggestions for I-70.

Widen 70 to six lanes to Grain Valley. This should be super high priority. If you can, widen it to Oak Grove.

Widen 70 between 435 and 470. That is where traffic is the most congested and where traffic is merging the most.

Add more lanes under 435 and get rid of the lane drop, like you did at 435/350.

Add lighting to 70 east of 435.

Add auxiliary lanes between the exits east of 435. Auxiliary lanes between Noland, Lee's Summit and 470 would do wonders to keep traffic flowing.

Add auxiliary lanes between Little Blue and Woods Chapel, especially eastbound where traffic backs up going up that hill.

We don't need HOV lanes or anything like that, if we just make the highway function better it will move just fine, even during rush hour, and commuter buses won't be delayed, but please do put some money into the commuter lots. They should all be as nice as the new one on route 7 and more funding for transit would be great if that is a MoDot issue. I ride the Blue Springs Express sometimes and it's always overcrowded.

Rebuild the area around the Truman Sports Complex. That bridge is embarrassing to visitors, why can't we have a nice bridge at that location like what you seen in some of the suburbs in St Louis or Johnson County?

I-70 west of 435 seems to do ok, but I'm sure it needs to be rebuilt as well, so may as well look at widening it in the process of that, but I wouldn't widen I at the expense of other needs. The congestion is worse east of 435. But do think about adding the missing ramps to and from US-71 and get KDOT to route 70 across 670 change the Lewis and Clark to I-670 to end most of the confusion to drivers trying to stay on 70 through town.

And please don't tear things up for years and not actually accomplish anything. For example, I live in Blue Springs and I-70 was rebuilt through Blue Springs and things were tore up for years and MoDOT didn't even replace the bridges at the Woods Chapel and Route 7 interchanges, plus they could have built the third lane to Adams Dairy as well. Now we will have to go through that entire process again to replace the bridges.

Again, MoDOT should be out there next week adding that median lane east of

Route 7. I-70 and Adams Dairy is a disaster in the making.

No way would that have happened in Johnson County or suburban St Louis, the bridges would have been replaced at the same time, even if the city has to step up with some funding.

So there are my opinions. Thanks for the reply!

• 01/22/2009 08:22 PM

it is rumored that the new plans would move the highway through my block. can you tell me if that is true or when you would be able to tell me if it involves my neighborhood.

• 01/24/2009 07:24 PM

Please find a way to improve traffic flow on eastbound I-70 at the 435 interchange. The traffic coming off 435 is trying to come over to the left hand lanes, the through lanes of I-70. Some of the traffic on I-70 is trying to get over to exit on Blue Ridge Cutoff and have a very short distance to do it, while trying to avoid the I-435 traffic coming to the left lanes. It causes a major slow down every rush hour.

• 01/25/2009 10:24 PM

In reading the 4 strategies online, I can only see that the only viable long-term option is to add general lane capacity. The three other options are Band-Aids that seem to be a fix

for the next 10 to 20 years. I-70 from downtown to I-470 has needed to be 8 lanes for a long time now. I would not be in favor of any option other than making I-70 an 8 lane interstate from downtown to I-470 including improvements to the I-435 interchange. One other beneficial project is a ramp to south 71 Hwy from I-70 westbound and vice versa.

• 01/26/2009 10:47 PM

I would like to know what the effects of widening I 70 and US 40 will have on my property which sets on 40 and I 70 thank you I'll be waiting to hear back

01/28/2009 10:30 AM

is it in the planning to make i-70 at 435 to 3 lanes? it is really a bottle neck during rush hour traffic. whoever design that interchange had no idea the amount of traffic that goes through there, the blue ridge cutoff at the sport stadiums is mostly the problem.

• 01/28/2009 10:35 AM

Who would be a good person to contact to find out if there is an opportunity for us to assist the project team with the design and construction aspects of the project?

• 01/29/2009 8:00 AM

Is there any way to add bike lanes to the adjacent freeway area as constructon evolves. It would be great to ride from Independence to downtown along a safe route.

• 01/29/2009 8:51 AM

I would like to see a carpool lane and bus lane.

thanks for the info about i-70 past blue springs.

• 01/29/2009 9:10 AM

Reversible lanes seems like a highly efficient use of lane space. Could consider a one way concept for the downtown loop.

• 01/29/2009 9:45 AM

If you do HOV lanes of any kind be sure that motorcycles are allowed full access. I'm not in favor of HOV toll lanes in general, but motorcycles should have full, free, access to them as well. Please encourage the use of these congestion reducing vehicles. Do not relegate them to second tier status by leaving them out of the plan. Thank you very much.

• <u>01/29/2009 10:37 AM</u>

This is in regards to the reconstruction proposal on 70 hwy. I live in Independence and drive to Lenexa everyday for work, and i-70 is a very integral part of that commute. The lanes are narrow, the potholes and the hills, and the oncoming traffic make the drive a tedious one. If they added another lane, point blannk on both sides, and gave the

HOV/carpool lane a whirl, (and got up to speed with other cities) I think that it would make thousands of morning commutes alot better. Thank you!

01/29/2009 12:20 PM

Any rebuild of I-70 in Downtown KC must include attempting to modify the Consent Decree to allow northbound US71 traffic to travel eastbound on I70, and westbound I70 to travel southbound on US 71.

In another separate matter, the US71 corridor needs to be revisited. The traffic signals and surface cross streets are a safety problem. The community has lived with US71 now for some time; maybe reopening the court case to allow proper overpasses would now be acceptable.

I've always been puzzled by the lack of a Kansas City/New Orleans Interstate route. I-29 should have continued south. Thanks.

• 01/29/2009 1:05 PM

How about a double level freeway. Install a top deck for all motorists wish to go completely through KC downtown area?

• 01/29/2009 4:51 PM

After reading the article in today's KC Star concerning fixing I-70, I have a concern that I would lkie to share. As you enter KC on I-70 from the east, there are green signs that specify routes for 670 and I-35. As you continue east, you go under the Bartle Hall building extension. During the day, it is very dark in that location, and as you continue east under Bartle, there is a large green overhead sign that denoted the lanes for I-35 South and 670 West. This sign is EXTREMELY DIFFICULT to read due to the fact that it is either not illuminated or if it is, the illimination is so low that it makes it almost impossible to read the sign until you are almost on top of it. I have seen a lot of cars that wanted to go south on I-35, but were in the right lane and ended up going west on to 670, or trying to cross over into the left lane to go onto I-35 South. This sign has been severely under illuminated or not illuminated at all, for a very long time. Well over a year. The sign serves very little function during daylight hours. I know that there is a green overhead sign that designates routes before you enter the tunnel caused by Bartle Hall, But the one in question needs much more illumination during daylight hours.

• 01/29/2009 7:27 PM

The first thing that comes to mind is that in the past few years, I remember that MoDOT asked us what we wanted to see for I-70. At the time, you asked if we should create, in effect, a new I-70, off the current highway. I remember giving you my input on that that I thought it was a wrong development and that we should just widen the current highway.

Now, you're asking us the same thing.

I-70 is an extremely dangerous highway, particularly between Kansas City and St. Louis. I've seen many accidents, myself, around Columbia. My partner was run off the highway, just West of St. Louis.

So please, please widen I-70 and as soon as possible.

My next thought is both a point and a question: Do you not have these plans already on the board? I assume you don't. If you did, I wouldn't think you'd be having this dialogue. And if you don't, why not? And since you apparently don't, how soon are you going to get these on the board so they can go forward?

The current new Presidential administration wants highway plans like these, right now, that are ready to go, and you apparently aren't ready to go, apparently but, I'd say, obviously.

What have you been doing all these years? We've needed to get good plans for I-70 and you're not ready and I find this frustrating, diapoointing and a bit maddening.

Instead of continuing to ask us what to do, you need to get plans to expand I-70 as soon as possible. The time is way past due. Get the plans to expand I-70 on the board. Do your job, do it well and do it quickly.

01/30/2009 12:06 PM

I propose for the downtown area that the loop be reconstructed as a four-lane wide ONE WAY loop counter-clockwise with all off-ramps on the outside of the loop and all on-ramps on the inside.

A major two-way freeway would branch off from each corner, NE would be I-29, I-35 & US-71 across the Paseo bridge, NW would be I-70 across to Kansas, SW would be I-670 across to Kansas and I-35 south, and SE would be I-70 east and US 71 south.

All of the access points to downtown would have non-conflicting traffic flow since the traffic entering the loop would be on the inside of the loop and flowing with traffic on the loop itself, and traffic exiting the loop would be exiting on the outside (right side of the loop), also in the same direction.

The only problem would be for anyone seeking to enter the loop at one point, then exit it later without leaving the downtown area. There should not be much traffic of this sort, since these drivers can get to where they are going without using the loop at all, on the city streets.

At the corners, traffic coming toward downtown would enter the loop via a simple right-side ramp that would have to be at least two, probably three lanes wide. Traffic on the loop would exit toward the outbound highways on a similar ramp.

The whole structure should not require much additional land, since the current loop already has four lanes (two each way) and all of the entrance and exit ramps can be simple, straight ramps, no cloverleaf loops.

• <u>01/30/2009 12:23 PM</u>

I appreciate you requesting some feedback to the I-70 concerns/issues.

I moved to KC in April 2007 from several years in the Phoenix, AZ area.

One of the first things that I noticed while starting to learn my way around my new metro's highways was the very big differences of driving here verses there. One of the worst in the area, I consider is to be just this...the I-70 from my downtown home to the areas going east of the metro. The sharp almost insane for highway driving curves and short on/off ramps are just horrible! On another note, but somewhat the same is that the metro suffers from almost invisible lane striping and notification markings on the roadways.

Please DO upgrade and improve the transportation modes of yesterday!

Please focus on the concerns & issues of today for this great American city.

Thank you for your time

• 01/30/2009 2:54 PM

Regarding an article by the Kansas City Star on 29 Jan, I would like to add a public comment on the proposed improvements to Interstate 70. To me the simplest improvement to the downtown loop would be to redesign the existing loop to create 'express' portions for through traffic, and 'business' or 'local' portions for downtown access. For example, the northern portion could be redesigned to allow ramps for I29, 9, and 169 ONLY. The southern portion could then be redesigned to provide local access. Consideration could also be given for replacing this southern portion with a 4-6 lane (tree lined?) boulevard.

I never understood the original rational for the loop configuration in the first place - I would be curious if you could shed some light on this. The DT loop has always struck me as one of the most poorly designed urban freeway systems that I have encountered. This is difficult to understand especially given the lack of spatial and geographic constraints of DT Kansas City, compared to, say, Seattle or Portland, OR.

• 01/30/20<u>09 3:06 PM</u>

Commuter rail would be an ideal solution to this radpidly growing area.

• <u>01/30/2009 3:06 PM</u>

Nowhere has it been suggested that commuter rail could be a solution to this problem. Extra buses aren't going to help because they utilize the same infrastructure that all the cars do contributing to the same problem. Commuter rail will move far more people to jobs than HOV lanes and the reversible lanes (death lanes) will confuse people and are

potentially dangerous. You should be looking at cities like Denver, Austin and Boston at how their systems work. Commuter rail is an integral part of their system that is comparably cheaper than light rail. Kansas City needs commuter rail and this corridor is a great place for it to begin.

• 01/30/2009 3:09 PM

Is anyone talking anything about a well thought out plan for the future? Isn't an HOV lane and express lane a band aid for the inevitable expansion of eastern Jackson County. People need alternatives, more economical and environmentally friendly transit options. Sure the expansion will reduce congestion, but at the price of what? My vote will be cast for a sensible solution such as regional rail transit.

01/30/2009 3:14 PM

To reduce congestion on I-70 from downtown Kansas City to Independence, I suggest that you consider commuter rail as an option. Living less than five minutes away from the Truman Sports Complex, I would be willing to use the commuter rail as I deal with congestion every day on my commute to and from work.

• 01/30/2009 3:17 PM

Have you thought about commuter rail? I understand there is quite an extensive plan coming together for the KC Metro area that might be some interest to everyone.

• 01/30/2009 3:17 PM

After reading the article in the KC STAR - I feel like the 4 items listed should be augmented. A fifth item, some form of Regional Rail should be included in the Study. As you know the County Leadership of Platte, Clay and Jackson have announced that they are taking the lead on a regional approach to the transportation problems and opportunities in the area. I am aware that KCS has indicated a willingness to consider their Gateway Railroad line from Odessa, Oak Grove, Blue Springs, Independence into Kansas City as part of the solution to develop a cost effective alternative to simply building more highway lanes. Couple this with implementing Commuter Rail on UP's former Rock Island line then many thousands of vehicles could be effectively removed from the existing interstate system in the Kansas city area. This would be consistant with the "Smart Moves" plan that was adopted in the past. As I am sure you are aware, Kansas city is the second leading rail hub in the nation. Only Chicago has more daily trains operating in the area. And this is only because the Chicago area has more than 600 passenger trains daily moving a large portion of their citizens. Let's not limit ourselves to a predetermined set of solutions and miss the opportunity to use some of the basic assets of the Kansas City area by limiting the study to only the 4 items listed. Feel free to contact me to discuss this further at the above contact information. Thank ou.

• <u>01/30/2009 3:18 PM</u>

The designation of I-70 around the east and north legs to the Lewis and Clark and then to Kansas for through travelers who do not know the shorter straight through route available on I-470 causes needless congestion. Switching I-70 designation to the more efficient straight through route would have far less congestion. Good frontage roads on both sides of I-70 from the Blue river to the Kansas line along with fewer interchanges would greatly ease congestion. I have driven in many large cities who have this system and it works beautifully.

• 01/30/2009 3:28 PM

I think that straitening the 2 curves, 1 extra lane on each side of I-70, a dedicated center lane for bus/carpool and a commuter rail system. Not light rail but commuter rail. This can serve the needs of people from Downtowmn to Arrowhead and can be located in the same corridor as the bus/carpool lane! I do work for a trasit firm and these are great ideas, not only to us, but to anyone that drives I-70, wether everyday or for entertainment events city wide.

01/30/2009 3:31 PM

I believe developing a rail commuter systems would reduce the congestion on I-70 and other auto commuter routes in the Kansas City area. I did not see rail commuter rail as an option. The I-70 corridor could be one location for the rail commuter line as well as a number of existing rail and road corridors. As far as immediate roadway improvements, I'm sure the elimination of the I-70 lane drop at the I-435 interchange and the reduction of the curves at Benton and Jackson are among the top priorities.

01/30/2009 3:32 PM

"Our mission is to provide a world-class transportation experience that delights our customers and promotes a prosperous Missouri". I know of have lived here my whole life and have yet to see this "world class transportation experience", only one which consists of one mode of transportation. I wish you would stop thinking they were Missouri Department of Highways, and start acting you are actually the Department of TRANSPORTATION. The vast majority of political entities which are known as "growing" or "progressive" have built, have under construction and/or have in planning some phase of rail network... yet every plan you come up with consists of more surface highways. The cities that have rail as a supplement to their network all still continue to build highways - so you don't have to lose all focus. I am not saying you have to build rail, but I wish you would at least consider it. Every "highway" project that comes up should have a no-build option as well as a no-highway option (which would consist of something other than limited access freeways). I would love to hear your thoughts on the subject.

• 01/30/2009 3:39 PM

We need to add lanes to I-70 throughout the project and maybe create POV lanes through the most congested areas. Reconfigure some of the exits (435 &470) with flyovers to allow better flow.

• <u>01/30/2009 3:40 PM</u>

I believe it is time for us, as a state, to get serious about non-expansion oriented means for relieving congestion on our highways, especially around urban areas. In this case, there is an under-utilized rail line paralleling I-70 from downtown Kansas City to Odessa, Missouri. Our transportation policy needs to begin recognizing that more highway lanes just begets more cars. Providing alternative modes of transit, such as commuter rail, may be the only way of appreciably reducing congestion.

• 01/30/2009 3:58 PM

An expanded bus system and/or commuter rail should be considered.

Ramp metering might be a good way to balance traffic flows on the interstate, and make alternative routes like Route 40 used more.

MoDOT should investigate innovative strategies to work with KCMO and the neighborhoods around the Jackson curve. With all of the private redevelopment occuring in this area, it seems a public/private partnership could provide a mechanism to purchase properties for the highway realignment while providing relocation into the same neighborhood for property owners. Something similar could be arranged with the commercial properties near the Benton curve. This would lessen the impact to the neighborhoods, impact to the property owners, and would improve infill and development in these distressed areas of the city.

01/30/2009 4:16 PM

Please think about commuter rail to help with the problems of I-70, I am originally from the D.C. area and rail was a way of life for me. Thank you.

• <u>01/30/2009 4:36 PM</u>

I would like to see a commuter rail system in place. I drive I70 only at times when I know it shouldn't be congested. The highway takes longer during high traffic to travel than a 35 mph street with several stop lights. The highway is severely outdated. I hope you can take the commuter rail option into consideration to help bring the transportation system into the 21st century.

• 01/30/2009 8:28 PM

I work for Kansas City Power & Light as a planning engineer. I would like to be involved in this project to provide information and suggestions for any changes to this highway corridor.

01/30/2009 8:46 PM

To start out putting the 24,000 pound truck limit on trucks for the left lane use is a great start. I-70 needs to have I-435 under pass widen to three lanes both directions. The entrance on ramps need to have longer merge ramps. You need to put ramp timed traffic lights in to help vehicles merge into traffic better during rush hour times (West AM rush hour, East PM rush hour). I-70 needs to have the sharp curves taken out and make turns that are 65 MPH speeds. With these adjustments you would increase traffic flow better than its been for decades.

01/30/2009 8:49 PM

I am a planning engineer with Kansas City Power & Light. My company owns many utility crossings of I-70 and I-670, both underground and overhead. In some cases, we even have manholes that exist within the roadbed of the interstate.

I would like to provide your project with information about the KCP&L system.

I would also like to collaborate with your team in an effort to maximize opportunities for KCP&L system expansion or replacement.

Please let me know how I can best become involved with your project.

• <u>01/30/2009 11:21 PM</u>

I've taken the 291/I-470 for many yrs. The P.M. east-bound rush hour is The Big Problem (You probably already know the why's, if not, since I obsess on it every trip home I can help)..... Fixing Key Bottlenecks has my vote, but with some reservations: (1) Designated bus lane. Not nearly enough bus traffic to justify sacrificing a car lane. Besides, the bus traffic keeps up with the rest of us and isn't a problem to begin with. P.S. Semi's don't cause problems they once did since they don't ride 3-lanes abreast anymore. (2) Downtown loop ramp closings: Would need master coordination w/KCMO, especially the S.W. loop around Sprint/Bartle Hall. Not too promising, con-sidering KC's track record on the downtown street patterns. Point being: When there's an accident within the loop, or bad weather, or big Bartle Hall/Sprint Center events, we'll need those "bail out" exits - the city streets couldn't handle the traffic what with stoplights at every exit ramp & street corner. This is already a problem with the existing ramps, especially with Sprint Center since everybody's getting there/leaving at once - cutting back would make it even worse. (3) The a.m. westbound commute isn't bad. It's the p.m. traffic, but you probably know the cause (I-435 interchange) and the reason (I obsess on it every trip home - thru lane reduction, not enough e.b. traffic exiting I-70 and too much entering onto the other side of the overpass, the jam doesn't break up until Noland Rd. It's especially bad on Royals P.M. games - I hope the new plan takes that into consideration too; I've sat stalled on Manchester Bridge many an evening, everybody gets there early to tailgate. (5) Please no stoplights at the bottom of the downtown loop exits - bad enough as it is now just when cars slow down entering E-bound I-70 from Broadway (rear-enders) - besides that would back up B-Way traffic. (6) I-70 toll road? There's only a handful of alternate thru routes parallel to I-70 and they're not equipped to handle shut-downs as it is, much less every single day. I-70 is The East/ West coorider. Add to

that the immense amount of traffic. This is akin to damming up the creek every mile or so to increase water flow? Why should we pay money when we're already in traffic jams for free? (7) Standing Ovations for: (a) Grandview Triangle - how that was accomplished in the midst the old without totally tearing it down is amazing (b) Noland Road bridge overpass, ahead of schedule and with as minimum discomfort as possible to the driver. (c) Eastbound I-470 @ 50 Hwy project.

• 01/31/2009 9:22 AM

I am personally in favor or a commuter rail-type system! I recently visited London, England was truly amazed at their commuter rail system. My husband was teaching in a village an hour north of London. While he taught, I commuted to central London several times a week to visit various sights. Their system was so AMAZING!!! I had the option of traveling the Express Train (~45-minute commute) or taking the regular commuter train (~1-hour commute). I purchased one ticket that was good for ANY train and double-decker bus in a 24-hour period. Their fantastic commuter transit system enabled me to travel all over the vast city of London in a matter of minutes!

My point: Kansas City and Metro areas could really benefit from a London-type commuter transit system and firmly believe we would be making a huge impact on the environment by reducing our carbon footprint. Kansas City should be the first major city in the midwest to be an "Green Leader" and have a commuter rail.

• 01/31/2009 10:54 AM

I would like to see active management road practices utilized on I-70. There are many new ideas being implemented around the country and Kansas City should benefit from the latest technology. I also favor HOV lanes. At present they are only needed part of the day. HOV lanes would be a huge step in getting a real BRT/express type commuter bus on I-70. Currently the commuter buses are called express only because they don't have any stops between Blue Springs and downtown, but they travel at the same speed and in the same congestion as the cars. An upgrade that allowed the buses to go faster than the cars during congested times would have a huge impact on ridership.

• 01/31/2009 1:30 PM

What about commuter rail and taking some traffic off of I-70 altogether?

• 02/01/2009 12:37 PM

I own a business AT the benton curve. 3110 E. 13th. I want to make sure I'm kept informed of all plans that effect my property. Please include me on all mailing list for property owners.

• <u>02/02/2009 3:11 PM</u>

I am particularly interested in those I-70 improvements that might deal with the north loop of Downtown Kansas City and connecting intersections.

02/03/2009 6:56 PM

Too bad there isn't money to eliminate the Benton Avenue curve at I-70 and Truman R Road, Kansas City.

VERBATIM COMMENT CARD RESPONSES

Nine comment cards were received at the meeting. The cards included three questions:

- What do you like most about the strategies?
- What do you like least about the strategies?
- Which strategy do you prefer? Why?

Meeting participants provided the following verbatim responses to the questions:

What do you like most about the strategies?

- Improving the road is great MoDOT needs to.
- The Fix Key Bottlenecks strategy.
- Fixing bottlenecks.
- Inclusion of transit and HOV lanes.
- Fixing the curves.
- Good use of the computer.

What do you like least about the strategies?

- It's going to be a long time from now.
- I don't want a strategy that takes my house (just north of Benton curve, street between fence and I-70).
- Most of the problem lies in the Benton and Jackson curves. Jackson curve is probably solvable; Benton curve is unsolvable in each plan.
- What does it mean, "Fix curves as far as practical in existing right of way"? This doesn't sound like much of a fix.
- The Add General Lane Capacity strategy.
- Adding general travel lanes.
- Transportation Improvement Corridor strategy is just too nebulous a concept. Focus on reducing travel demand in the corridor and/or shifting more people to transit and carpooling.

Which strategy do you prefer? Why?

 Put in lanes for big rigs and heavy trucks. Have smaller vehicles, vans, and pick-ups on existing lanes. Politicians in Jefferson City and Washington D.C. should get money for projects.

- Adding HOV lanes.
- Any strategy that does not involve widening near my house.
- My proposal of rerouting I-70 between I-435 and Benton curve less bridge expansions through undeveloped land with no shut-down time.
- Fixing bottlenecks would be cost effective and not contribute to sprawl. We need commuter rail as an option.
- Fixing bottlenecks.
- Fix key bottlenecks plus congestion pricing.
- Not sure depends on available funding.

Other comments:

- Getting to the top of Blue Ridge and merging with entering traffic is the main point of inbound congestion. I-70 outbound traffic merging with traffic off of I-435 is a primary outbound issue. There is slowing traffic approaching Blue Ridge Boulevard. These are the bottlenecks.
- Inbound I-70 has been much better since Hwy 71 opened.
- What about four lanes from I-470 to I-435.
- When police are ticketing on Manchester during the evening, it definitely causes a slowdown for outbound traffic.
- In the winter, some lighting under the new Noland Road Bridge may help increase speeds.
- People brake because of the rough pavement on the interchange of Blue Ridge Boulevard and I-70.
- There is rubbernecking at the new shopping center at Blue Ridge Boulevard.
- There should be more visible instructions on I-70 on what to do in case of a minor accident.
- Adjust the timing of lights at Hwy 40 and Blue Ridge Cutoff, and Sterling and Highway 40 to allow better outbound flow.
- Maintain nearby ready assistance each day for possible breakdowns and accidents.
- Construct an elevated, single HOV lane in the current ROW.
- Build a 2.5 mile tunnel beneath Blue Ridge and make it a two-lane HOV lane.
- Remove the traffic lights from Hwy 71 to attract more people to use it and thereby reduce traffic on I-70.

I-70 FTEIS MoDOT Mobile Meeting

January 9, 2009

OVERVIEW

As part of the planning process for the I-70 First Tier Environmental Impact Statement (FTEIS), the Missouri Department of Transportation (MoDOT) prepared a series of possible improvement strategies for I-70. The strategies were put on display for public review and comment during a January 9, 2008 Mobile Meeting at the Wal-Mart Supercenter (4200 Blue Ridge Boulevard in Kansas City, Missouri). MoDOT stationed its Voice Van, tent, and exhibits near the front of the store and staff distributed the project business card to shoppers as they entered/exited from the store's two front entrances. Approximately 200 cards were distributed that directed individuals to the project web site. Patrons were encouraged to stop by the Voice Van to talk with MoDOT staff and to review the following exhibits:

- Purpose and Need
- From Idea to Reality The overall process for a transportation project
- FTEIS Schedule
- 4 Strategy Packages
 - o No-Build
 - o Fix Key Bottlenecks
 - Add General Lane Capacity
 - o Fix Key Bottlenecks plus Transportation Improvement Corridor
- Getting Involved Project Contact Information

The meeting gave MoDOT the opportunity to gain input from residents and commuters about the project by going directly to them rather than scheduling a traditional public meeting. More mobile meetings are planned for the future. Feedback from the January 9th mobile meeting related to the following topics:

- Widening and adding lanes to segments of I-70, e.g.
- Areas of high priority, including Benton and Jackson curves
- Truck-only lanes and other solutions to congestion

The following were verbatim comments from participants' comment cards:

- Widen I-70, at least from downtown to Independence Mall.
- Add one lane, maybe two, out to the shopping area at 470.
- I like the solution that adds another lane in each direction.
- I do not want more lanes.

- It is dangerous at I-435 and MO-291. I have experienced an accident at I-70 eastbound and MO-291 north.
- MO-291 and I-70, and I-435 and I-70 need more space for vehicles to exit and enter.
- Benton curve is the greatest concern.
- Fixing Benton curve is the highest priority.
- Eliminate the Benton and Jackson curves.
- Build straight lines between curves by buying the property to do so.
- MoDOT should use the strategy that Fixes Key Bottlenecks Plus the Transportation Improvement Corridor.
- There should be more options statewide on this high-speed corridor.
- I like the idea of left lanes not including trucks.
- The truck lane should extend from the State Line Road to I-470, with speeds reduced to 45 mph for the truck lane. Yellow Freight and other union carriers have to abide by union rules for driving trucks. Other truckers aren't following the same rules. They're driving too close to passenger vehicles, with the potential for truck accidents. Amount of trucks on the highway make truck-only lanes necessary.
- I would like regulations that were enforced with spacing between trucks and other vehicles.
- MoDOT should build a connection from Jackson Avenue to US 71.
- Prettier landscaping along I-70.





Date:
Organization/Group:
Location:
Group Organizer (Contact):
Contact's Phone No.:
Contact's Email:
Speaker(s):
No. of Attendees:
Key Issue(s):
Follow Up:





Date:	February 19, 2009 (12-5pm)		
Organization/Group:	CCTA Industry Day Convention		
Location:	Harrah's Convention Center		
Group Organizer (Contact):	NA		
Contact's Phone No.:	816-935-5568		
Contact's Email:	kcta99@msn.com		
Speaker(s):	Allan Zafft, Jeff Cremer, Jennifer Benningfield, Chris Nazar in shifts		
No. of Attendees:	Exposure to 225 attendees via exposition booth		
Key Issue(s):	None		
Follow Up:	None		





Date: February 23, 2009 - 4-6 pm

Organization/Group: Heritage Park Condo Association

Location: Heritage Park Condominiums - Crysler and I-70 (NE Quadrant)

Group Organizer

(Contact):

Joy Freeland

Contact's Phone No.:

Contact's Email: joyfreeland@gmail.com

Allan Zafft, Chris Nazar

Speaker(s):

5

No. of Attendees:

Key Issue(s): Impacts adjacent to their property. Potential footprint could come

to the edge of their property. Want to stay involved. Concerned

about long-term right-of-way acquisition process. Concerned

about the visibility of their community and the affects of any noise

walls. View of property is important to them. The property has a

Gazebo/recreation area at the SW edge that is their yard space.

Want to keep informed. Have only sidewalk on west side of

Crysler bridge.

Follow Up: Send two copies of alternatives maps. Make sure they are on

contact list. Allan received business cards.





Date:	
Organization/Group:	
Location:	
Group Organizer	
(Contact):	
Contact's Phone No.:	
Contact's Email:	
Speaker(s):	
openier(s).	
No. of Attendees:	
Key Issue(s):	
•	
Follow Up:	
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Date: February 18, 2009 at 7:00 p.m.

Organization/Group: Columbus Park Community Council

Location: Don Bosco Center

580 Campbell Street, Kansas City, Missouri

Group Organizer

(Contact):

Mike Sturgeon

Contact's Phone No.: (816) 842-1126

Contact's Email: Mike.Sturgeon@vvfllc.com

Speaker(s): Allan Zafft and Randy Rowson

No. of Attendees: 18

Key Issue(s):

- One participant wanted to know how long it might be before the project would be under construction
- One participant wanted to know to what extent public comments would be used – suggested consideration of kcIcon and U.S. 71 comments
- Suggestion to re-designate I-70 across the south leg of the downtown loop.
- One participant wants to have sound walls from M-9 to the east
- One participant wanted consideration for a park and ride lot in the downtown area.
- One participant asked about light rail or high speed rail opportunities.
- Question if Stimulus package funding was available.
- Comment Noise study readings should be taken during peak





traffic periods – not off peak times unlike past studies.

• One participant would like to see HOV lanes to bring Kansas City up to date with other cities.

Follow Up:

• Share results with core team





Date: February 13, 2009 at 11:30 a.m.

Organization/Group: Downtown Council – Infrastructure Committee

Location: Town Pavilion Building, 4th Floor Conference Center,

1100 Walnut Street, Kansas City, Missouri

Group Organizer

(Contact):

Meghan Coulter

Contact's Phone No.: (816) 421-1539

Contact's Email: meghan@downtownkc.org

Speaker(s): Lee Ann Kell and Chris Nazar

No. of Attendees: Approximately 25

Key Issue(s):

- One participant wanted to see the study extended to include I-35 south of the loop to the State Line
- One participant wanted to see mitigation of past impacts as part of the Purpose and Need
- Questions about who is the interface for the City when it comes to dealing with changes to on and off ramps - including I-670 ramps that was removed.
- Need to understand how ramp closures would work need to work upfront with the City on this - both MoDOT and Downtown Council
- Performing Arts Center is doing a parking study including the affects on I-70
- One participant asked about commuter rail and expressed that ridership would be higher than previously forecast - due to gas prices.





• One participant wanted to see lower speeds on I-70 and traffic calming measures to encourage drivers follow speed limits.

Follow Up:

- Share results with core team
- Lee Ann may get follow-up inquiry on I-35





Date: January 20, 2009 at 9:30 a.m.

Organization/Group: Mid-America Regional Council – Total Transportation Policy

Committee

Location: 600 Broadway, Suite 200; KCMO 64105

Group Organizer

(Contact):

Ron Achelpohl

Contact's Phone No.: (816) 474-4240

Contact's Email: rona@marc.org

Allan Zafft and Chris Nazar

Speaker(s):

Approximately 25

No. of Attendees:

Key Issue(s): HOV lanes and transit

Follow Up: